

**Enclosure 2**

**Chapter 38**

**Waste Management - Hazardous Waste Permitting Process**

**TITLE 401**  
**NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET**  
**DEPARTMENT FOR ENVIRONMENTAL PROTECTION**  
**DIVISION OF WASTE MANAGEMENT**

**Chapter 38**

**WASTE MANAGEMENT - HAZARDOUS WASTE PERMITTING PROCESS**

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Effective Date - March 12, 1997

**401 KAR 38:005. Definitions Related to 401 KAR Chapter 38.**

**RELATES TO:** KRS 224.01, 224.10, 224.46, 40 C.F.R. 260.10, 261.1 and 401 KAR Chapter 38

**STATUTORY AUTHORITY:** KRS 224.10-100

**NECESSITY, FUNCTION, AND CONFORMITY:** This chapter implements provisions of KRS 224.46-510 and establishes the general provisions applicable to generators of hazardous waste. This administrative regulation defines essential terms that are used in this chapter. The majority of terms defined in this administrative regulation are equivalent to federal terms contained in 40 CFR Parts 260 through 299. Some terms have been clarified to eliminate federal ambiguities and to conform to Kentucky statutory mandates. Definitions contained in KRS Chapter 224 have been referenced to the appropriate statutory citation. Some terms do not have a federal counterpart. These terms have been added to clarify requirements and provisions of KRS Chapter 224 and this chapter.

**Section 1. Definitions.** Unless otherwise specifically defined in KRS Chapter 224 or otherwise specifically indicated by context, terms in 401 KAR Chapter 38 shall have the meanings given in this Section.

(1) "100-year floodplain" means any land area which is subject to a one (1) percent or greater chance of flooding in any given year from any source.

(2) "100-year flood" means a flood that has a one (1) percent chance of being equaled or exceeded in any given year.

(3) "Aboveground tank" means a device meeting the definition of "tank" and that is situated in such a way that the entire surface area of the tank is completely above the plane of the adjacent surrounding surface and the entire surface area of the tank (including the tank bottom) is able to be visually inspected.

(4) "Accidental occurrence" means an accident, including continuous or repeated exposure to conditions, which results in bodily injury or property damage neither expected nor intended from the standpoint of the insured.

(5) "Accumulated speculatively" means that a material is accumulated before being recycled.

(a) A material is not accumulated speculatively, if the person accumulating it can show:

1. That the material is potentially recyclable and has a feasible means of being recycled; and

2. That - during the calendar year (commencing on January 1) - the amount of material that is recycled, or transferred to a different site for recycling, equals at least seventy-five (75) percent by weight or volume of the amount of that material accumulated at the beginning of the calendar year (including any material accumulated from previous years).

(b) In calculating the percentage of turnover, the seventy-five (75) percent requirement is to be applied to each material of the same type that is recycled in the same way. Materials accumulating in units that would be exempt from administrative regulation under Section 4(3) of 401 KAR 31:010 are not to be included in making the calculation. (Materials that are already defined as wastes also are not to be included in making the calculation.) Materials are no longer in this category once they are removed from accumulation for recycling.

(6) "Active fault" means a land area which, according to the weight of geological evidence, has a reasonable probability of being affected by movement along a fault to the extent that a waste site or facility would be damaged and thereby pose a threat to human health and the environment.

(7) "Active life" of a facility means the period from the initial receipt of waste at a waste site or facility until the Cabinet receives certification of final closure.

(8) "Active portion" means any area of a facility where treatment, storage, or disposal operations are being or have been conducted and which have not been closed. It includes the treated area of a landfarm and the active face of a landfill. Covered, closed, or inactive portions of landfills, building roofs, and roads are excluded unless designated as "active portions" by the Cabinet.

(9) "Admixed liner" means a liner made from a mixture of any of a multitude of materials, often asphalt or cement, with widely varying physical and chemical properties. Admixed liners shall be demonstrated to be structurally sound and chemically resistant to the waste placed in it so as to be capable of supporting the waste without cracking or disintegrating or allowing waste or leachate to escape.

(10) "Agricultural waste" means any nonhazardous waste resulting from the production and processing of on-the-farm agricultural products, including manures, prunings and crop residues.

(11) "Air stripping operation" is a desorption operation employed to transfer one (1) or more volatile components from a liquid mixture into a gas (air) either with or without the application of heat to the liquid. Packed towers, spray towers, and bubble-cap, sieve, or valve-type plate towers are among the process configurations used for contacting the air and a liquid.

(12) "Ampule" means a small sealed glass container for one (1) dose of sterile medicine.

(13) "Ancillary equipment" means any device including, but not limited to, such devices as piping, fittings, flanges, valves, and pumps, that is used to distribute, meter, or control the flow of hazardous waste from its point of generation to hazardous waste management units including tanks between hazardous waste storage and treatment tanks to a point of disposal on site, or to a point of shipment for disposal off site.

(14) "Application" means the form approved by the Cabinet for applying for a permit, including any additions, revisions or modifications and any narrative and drawings required by 401 KAR Chapters 30 to 48. The term includes: Part A of the application (Part A); Part B of the application (Part B); notice of intent; administration application; special waste application; or technical application.

(15) "Aquifer" means a geologic formation, group of formations, or part of a formation capable of yielding a significant amount of groundwater to wells or springs.

(16) "As received waste" refers to the waste as received in the shipment from the generator or sample collector.



(17) "Assets" means all existing and all probable future economic benefits obtained or controlled by a particular entity.

(18) "Attenuation" means any decrease in the maximum concentration or total quantity of an applied chemical or biological constituent in a fixed time or distance traveled resulting from a physical, chemical, or biological reaction or transformation occurring in the zone of aeration or zone of saturation.

(19) "Authorized representative" means the person responsible for the overall operation of a facility or an operational unit or part of a facility, such as the plant manager, superintendent, or person of equivalent responsibility.

(20) "Average volatile organic concentration" or "average VO concentration" means the mass-weighted average volatile organic concentration of a hazardous waste as determined in accordance with the requirements of Section 4 of 401 KAR 35:281.

(21) "Base flood" means a flood that has a one (1) percent or greater chance of recurring in any year, or a flood of a magnitude equaled or exceeded once in 100 years on the average over a significantly long period.

(22) "Battery" means a device consisting of one or more electrically connected electrochemical cells which is designed to receive, store, and deliver electric energy. An electrochemical cell is a system consisting of an anode, cathode, and an electrolyte, plus such connections (electrical and mechanical) as may be needed to allow the cell to deliver or receive electrical energy. The term battery also includes an intact, unbroken battery from which the electrolyte has been removed.

(23) "Board" shall have the meaning specified in KRS 224.46-810.

(24) "Bodily injury" shall have the meaning given by applicable Kentucky statutes. Bodily injury does not include those liabilities which, consistent with the standard industry practices, are excluded from coverage in liability policies for bodily injury.

(25) "Boiler" means an enclosed device using control flame combustion and having the following characteristics:

(a)1. The unit shall have physical provisions for recovering and exporting thermal energy in the form of steam, heated fluids, or heated gases; and

2. The unit's combustion chamber and primary energy recovery section(s) shall be of integral design. To be of integral design, the combustion chamber and the primary energy recovery section (such as water walls and superheaters) shall be physically formed into one (1) manufactured or assembled unit. A unit in which the combustion chamber and the primary energy recovery section are joined only by ducts or connections carrying flue gas is not integrally designed; however, secondary energy recovery equipment (such as economizers or air preheaters) need not be physically formed into the same unit as the combustion chamber and the primary energy recovery section. The following units are not precluded from being boilers solely because they are not of integral design: process heaters (units that transfer energy directly to a process stream) and fluidized bed combustion units; and

3. While in operation, the unit shall maintain a thermal energy recovery efficiency of at least sixty (60) percent, calculated in terms of the recovered energy compared with the thermal value of the fuel; and

4. The unit shall export and utilize at least seventy-five (75) percent of the recovered energy, calculated on an annual basis. In this calculation, no credit shall be given for recovered heat used internally in the same unit. (Examples of internal use are the preheating of fuel or combustion air, and the driving of induced or forced draft fans or feedwater pumps); or

(b) The unit is one (1) which the Cabinet has determined, on a case-by-case basis, to be a boiler, after considering the standards in 401 KAR 30:080.

(26) "Bottoms receiver" means a container or tank used to receive and collect heavier bottoms fractions of the distillation feed stream that remain in the liquid phase.

(27) "Burn" means burning for energy recovery or destruction, or processing for materials recovery or as an ingredient.

(28) "By-product" is a material that is not one (1) of the primary products of a production process and is not solely or separately produced by the production process. Examples are process residues such as slags or distillation column bottoms. The term does not include a coproduct that is produced for the general public's use and is ordinarily used in the form it is produced by the process.

(29) "Cabinet" shall have the meaning specified in KRS 224.01-010.

(30) "Carbon regeneration unit" means any enclosed thermal treatment device used to regenerate spent activated carbon.

(31) "Cation exchange capacity" means the sum of exchangeable cations a soil can absorb expressed in milliequivalents per 100 grams of soil as determined by sampling the soil to the depth of cultivation or solid waste placement, whichever is greater, and analyzing by the summation method for distinctly acid soils or the sodium acetate method for neutral, calcareous, or saline soils.

(32) "Certificate" shall have the meaning specified in KRS 224.46-810.

(33) "Certification" means a statement of professional opinion based upon knowledge and belief.

(34) "Closed portion" means that portion of a facility which an owner or operator has closed in accordance with the approved facility closure plan and all applicable closure requirements.

(35) "Closed-vent system" means a system that is not open to the atmosphere and that is composed of piping, connections, and, if necessary, flow-inducing devices that transport gas or vapor from a piece or pieces of equipment to a control device.

(36) "Closure plan" means the plan for closure prepared in accordance with the requirements of Section 3 of 401 KAR 34:070 or Section 3 of 401 KAR 35:070.

(37) "Closure" shall have the meaning specified in KRS 224.01-010.

(38) "Component" means either the tank or ancillary equipment of a tank system.

(39) "Condenser" means a heat-transfer device that reduces a thermodynamic fluid from its vapor phase to its liquid phase.

(40) "Conditionally Exempt Small Quantity Generator" means:

(a) A generator who generates no more than 100 kilograms of hazardous waste in a calendar month; or

(b) A generator who generates acutely hazardous waste listed in Sections 2, 3, and 4(5) of 401 KAR 31:040 in a calendar month in quantities no greater than one (1) kilogram. All quantities of that acutely hazardous waste are subject to administrative regulation under 401 KAR Chapters 32 through 39, and the notification and permitting requirements of KRS 224.01-400, 224.40-310, 224.46-510, 224.46-580, and 224.50-130 to 224.50-413.

(41) "Confined aquifer" means an aquifer bounded above and below by impermeable beds or by beds of distinctly lower permeability than that of the aquifer itself; an aquifer containing confined groundwater.

(42) "Connector" means flanged, screwed, welded, or other joined fitting used to connect two (2) pipelines or a pipeline and a piece of equipment. For the purposes of reporting and recordkeeping, connector means flanged fittings that are not covered by insulation or other materials that prevent location of the fittings.

(43) "Consignee" means the ultimate treatment, storage or disposal facility in a receiving country to which the hazardous waste is sent.

(44) "Constituent" shall have the same meaning as "hazardous waste constituent."

(45) "Container" means any portable device in which hazardous waste is transported, stored, treated, or otherwise handled, and includes transport vehicles that are containers themselves (for example, tank trucks, tanker-trailers, and rail tank cars), and containers placed on or in a transport vehicle.

(46) "Containment building" means a hazardous waste management unit that is used to store or treat hazardous waste under the provisions of 401 KAR 34:245 or 35:245.

(47) "Contaminate" means introduce a substance that would cause:

(a) The concentration of that substance in the groundwater to exceed the maximum contaminant level specified in 401 KAR 30:031, Sections 5 and 6 of 401 KAR 47:030, or Section 8 of 401 KAR 34:060;

(b) An increase in the concentration of that substance in the groundwater where the existing concentration of that substance exceeds the maximum contaminant level specified in 401 KAR 30:031, 401 KAR 47:030, or Section 8 of 401 KAR 34:060; or

(c) A significant increase above established background levels, for substances that do not have an established maximum contamination level.

(48) "Contamination" means the degradation of naturally occurring water, air, or soil quality either directly or indirectly as a result of human activities.

(49) "Contingency plan" means a document setting out an organized, planned, and coordinated course of action to be followed in the event of a fire, explosion, or release of waste or waste constituents into the environment which has the potential for endangering human health and the environment. Financial planning to identify resources for initiation of such action is a part of contingency plan development.

(50) "Continuous recorder" means a data recording device recording an instantaneous data value at least once every 15 minutes.

(51) "Control device shutdown" means the cessation of operation of a control device for any purpose.

(52) "Control device" means an enclosed combustion device, vapor recovery system, or flare. Any device the primary function of which is the recovery or capture of solvents or other organics for use, reuse, or sale (for example, a primary condenser on a solvent recovery unit) is not a control device.

(53) "Corrective action management unit" or "CAMU" means an area within a facility that is designated by the Cabinet under 401 KAR 34:287, for the purpose of implementing corrective action requirements under Section 12 of 401 KAR 34:060 and KRS 224.46-520. A CAMU shall

only be used for the management of remediation wastes pursuant to implementing such corrective action requirements at the facility.

(54) "Cover" means a device or system which is placed on or over a hazardous waste such that the entire hazardous waste surface area is enclosed and sealed to reduce air emissions to the atmosphere. A cover may have openings such as access hatches, sampling ports, and gauge wells that are necessary for operation, inspection, maintenance, or repair of the unit on which the cover is installed provided that each opening is closed and sealed when not in use. Examples of covers include a fixed roof installed on a tank, a floating membrane cover installed on a surface impoundment, a lid installed on a drum, and an enclosure in which an open container is placed during waste treatment.

(55) "Current assets" means cash or other assets or resources commonly identified as those which are reasonably expected to be realized in cash or sold or consumed during the normal operating cycle of the business.

(56) "Current closure cost estimates" means the most recent of the estimates prepared in accordance with Section 1(1), (2) and (3) of 401 KAR 34:090 or Section 1(1), (2) and (3) of 401 KAR 35:090.

(57) "Current liabilities" means obligations whose liquidation is reasonably expected to require the use of existing resources properly classifiable as current assets or the creation of other current liabilities.

(58) "Current plugging and abandonment cost estimate" means the most recent of the estimates prepared in accordance with 40 C.F.R. 144.62(a), (b), and (c).

(59) "Current postclosure cost estimate" means the most recent of the estimates prepared in accordance with Section 1(1), (2) and (3) of 401 KAR 34:100 or Section 1(1), (2) and (3) of 401 KAR 35:100.

(60) "Debris" means solid material exceeding a 60mm particle size that is intended for disposal and that is: a manufactured object; plant or animal matter; or natural geologic material. However, the following materials are not debris: any material for which a specific treatment standard is provided in 401 KAR 37:040, namely lead acid batteries, cadmium batteries, and radioactive lead solids; process residuals such as smelter slag and residues from the treatment of waste, wastewater, sludges, or air emission residues; and intact containers of hazardous waste that are not ruptured and that retain at least 75% of their original volume. A mixture of debris that has not been treated to the standards provided by Section 6 of 401 KAR 37:040 and other material is subject to regulation as debris if the mixture is comprised primarily of debris, by volume, based on visual inspection.

(61) "Designated facility" means a hazardous waste treatment, storage, or disposal facility which:

(a) Has received a hazardous waste site or facility permit (or a facility with interim status) in accordance with the requirements of 401 KAR Chapter 38;

(b) Has received a permit from a state authorized in accordance with 40 C.F.R. Part 271, and EPA permit (or a facility with interim status) in accordance with 40 C.F.R. Parts 270 and 124; or

(c) Is regulated under Section 6(3)(b) of 401 KAR 31:010 or 401 KAR Chapter 36, 40 C.F.R. 261.6(c)(2) or 40 C.F.R. Part 266, and

(d) That has been designated on the manifest by the generator pursuant to Section 1 of 401 KAR 32:020. If a waste is destined to a hazardous waste site or facility in an authorized state which has not yet obtained authorization to regulate that particular waste as hazardous, then the designated facility shall be a facility allowed by the receiving state to accept that waste.

(62) "Destination facility" means a facility that treats, disposes of, or recycles a particular category of universal waste, except those management activities described in Section 4(1) and (3) of 401 KAR 43:020 and Section 4(1) and (3) of 401 KAR 43:030. A facility at which a particular category of universal waste is only accumulated, is not a destination facility for purposes of managing that category of universal waste.

(63) "Destruction or adverse modification" means an alteration of critical habitat which appreciably diminishes the likelihood of the survival and recovery of threatened or endangered species using that habitat.

(64) "Dike" means an embankment or ridge of either natural or manmade materials used to prevent the movement of liquids, sludges, solids, or other materials.

(65) "Direct transfer equipment" means any device (including, but not limited to, such devices as piping, fittings, flanges, valves, and pumps) that is used to distribute, meter, or control the flow of hazardous waste between a container (for example, transport vehicle) and a boiler or industrial furnace.

(66) "Disposal" shall have the meaning specified in KRS 224.01-010.

(67) "Disposal facility" means a facility or part of a facility at which hazardous waste is intentionally placed into or on any land or water, and at which waste will remain after closure. The term disposal facility does not include a corrective action management unit into which remediation wastes are placed.

(68) "Distillate receiver" means a container or tank used to receive and collect liquid material (condensed) from the overhead condenser of a distillation unit and from which the condensed liquid is pumped to larger storage tanks or other process units.

(69) "Distillation operation" means an operation, either batch or continuous, separating one (1) or more feed stream(s) into two (2) or more exit streams, each exit stream having component concentrations different from those in the feed stream(s). The separation is achieved by the redistribution of the components between the liquid and vapor phase as they approach equilibrium within the distillation unit.

(70) "Domestic sewage" means untreated sanitary wastes that pass through a sewer system.

(71) "Double block and bleed system" means two (2) block valves connected in series with a bleed valve or line that can vent the line between the two (2) block valves.

(72) "Draft permit" shall have the same meaning as "proposed permit".

(73) "Drip pad" means an engineered structure consisting of a curbed, free-draining base, constructed of nonearthen materials and designed to convey preservative kick-back or drippage from treated wood, precipitation, and surface water run-on to an associated collection system at wood preserving plants.

(74) "Effluent Limitations" shall have the same meaning as KRS 224.01-010.

(75) "Elementary neutralization unit" means a device which:

(a) Is used for neutralizing wastes that are hazardous only because they exhibit the corrosivity characteristic defined in Section 3 of 401 KAR 31:030, or they are listed in 401 KAR 31:040 only for this reason; and

(b) Meets the definition of tank, tank system, container, transport vehicle, or vessel in this section.

(76) "Emergency permit" means a permit issued by the Cabinet to temporarily store, treat or dispose of hazardous waste in accordance with the provisions of Section 2 of 401 KAR 38:060, to temporarily manage, process, or dispose of a solid waste in accordance with the provisions of Section 2 of 401 KAR 47:150 or to temporarily store, treat, or dispose of special waste in accordance with the provisions of Section 1 of 401 KAR 45:135.

(77) "Endangered or threatened species" means any species listed as such pursuant to Section 4 of the Endangered Species Act, as amended, 16 U.S.C. 1536.

(78) "Engineer" shall have the meaning specified in KRS 322.010. An independent, professional engineer shall be registered in Kentucky pursuant to KRS 322.040 and shall be qualified to engage in waste management engineering practices.

(79) "EPA acknowledgment of consent" means the cable sent to EPA from the U.S. Embassy in a receiving country that acknowledges the written consent of the receiving country to accept the hazardous waste and describes the terms and conditions of the receiving country's consent to the shipment.

(80) "EPA hazardous waste number" means the number assigned by EPA and the Cabinet to each hazardous waste listed in 401 KAR 31:040, and to each characteristic identified in 401 KAR 31:030.

(81) "EPA identification number" means the number assigned by EPA or the Cabinet to each generator; transporter; or treatment, storage, or disposal facility.

(82) "Ephemeral stream" means a stream which flows only in direct response to precipitation in the immediate watershed or in response to the melting of a cover of snow and ice and which has a channel bottom that is always above the local water table.

(83) "Equipment" means each valve, pump, compressor, pressure relief device, sampling connection system, open-ended valve or line, or flange, and any control devices or systems required by 401 KAR 34:275.

(84) "Equivalent method" means any testing or analytical method, approved jointly by the administrator and the secretary under 401 KAR Chapter 31, or methods in 401 KAR Chapters 47 and 48, approved by the secretary of the Cabinet.

(85) "Existing" indicates a boiler or industrial furnace that on or before August 21, 1991 is either in operation burning, or processing hazardous waste or for which construction (including the ancillary facilities to burn or to process the hazardous waste) has commenced.

(86) "Existing component" shall have the same meaning as "existing tank system."

(87) "Existing facility" shall have the same meaning as "existing hazardous waste site or facility".

(88) "Existing hazardous waste site or facility" means a hazardous waste facility which was in operation, or for which continuous construction had commenced, on or before November 19, 1980. A facility has commenced construction if:

(a) The owner or operator had obtained the federal, state and local approvals or permits necessary to begin physical construction; and

(b) Either:

1. A continuous on-site, physical construction program has begun; or
2. The owner or operator has entered into contractual obligations, which cannot be canceled or modified without substantial loss, for physical construction of the facility to be completed within a reasonable time.

(89) "Existing portion" means that land surface area of an existing hazardous waste management unit, included in the original Part A permit application, on which wastes have been placed prior to the issuance of a permit.

(90) "Existing tank system" means a tank system or component that is used for the storage or treatment of hazardous waste and that is in operation, or for which installation commenced on or prior to July 14, 1986. Installation will be considered to have commenced if the owner or operator has obtained all federal, state, and local approvals or permits necessary to begin physical construction of the site or installation of the tank system and if either:

- (a) A continuous on-site physical construction or installation program has begun; or
- (b) The owner or operator has entered into contractual obligations, which cannot be canceled or modified without substantial loss, for physical construction of the site or installation of the tank system to be completed within a reasonable time.

(91) "External floating roof" means a pontoon or double-deck type floating roof that rests on the surface of a hazardous waste being managed in a tank that has no fixed roof.

(92) "Face amount" means the total amount the insurer is obligated to pay under the policy.

(93) "Facility" means:

(a) All contiguous land, and structures, other appurtenances, and improvements on the land, used for treating, storing, or disposing of hazardous waste. A facility may consist of several treatment, storage, or disposal operational units (for example, one or more landfills, surface impoundments, or combinations of them).

(b) For the purpose of implementing corrective action under Section 12 of 401 KAR 34:060, all contiguous property under the control of the owner or operator seeking a hazardous waste permit. This definition also applies to facilities implementing corrective action under KRS 224.46-520.

(94) "Facility mailing list" means the mailing list for a facility maintained in accordance with Section 7(3)(a)4.c. of 401 KAR 38:050.

(95) "Federal agency" means any department, agency, or other instrumentality of the federal government, any independent agency or establishment of the federal government including any government corporation, and the United States Government Printing Office.

(96) "Federal, state, and local approvals or permits necessary to begin physical construction" means permits and approvals required under federal, state, or local hazardous waste control statutes, administrative regulations, or ordinances.

(97) "Final closure" of a hazardous waste site or facility means the closure of all hazardous waste management units at the facility in accordance with all applicable closure requirements so that

hazardous waste management activities under 401 KAR Chapters 34 and 35 are no longer conducted at the facility unless subject to the provisions in Section 5 of 401 KAR 32:030.

(98) "First attempt at repair" means to take rapid action for the purpose of stopping or reducing leakage of organic material to the atmosphere using best practices.

(99) "Fiscal year" means a twelve (12) month period for accounting and other financial purposes.

(100) "Fixed roof" means a rigid cover that is installed in a stationary position so that it does not move with fluctuations in the level of the hazardous waste placed in a tank.

(101) "Flame zone" means the portion of the combustion chamber in a boiler occupied by the flame envelope.

(102) "Floating membrane cover" means a cover consisting of a synthetic flexible membrane material that rests upon and is supported by the hazardous waste being managed in a surface impoundment.

(103) "Floating roof" means a pontoon-type or double-deck type cover that rests upon and is supported by the hazardous waste being managed in a tank, and is equipped with a closure seal or seals to close the space between the cover edge and the tank wall.

(104) "Flood plain" means areas adjoining inland waters which are inundated by the base flood, unless otherwise specified in 401 KAR 30:031 or 401 KAR 47:030, and includes: 100-year floodplain and floodway.

(105) "Floodway" means the channel of the waterway, stream or river and that portion of the adjoining floodplain which provides for passage of the 100-year flood flow without increasing the floodwater depth across the 100-year floodplain by more than one (1) foot.

(106) "Flow indicator" means a device that indicates whether gas flow is present in a vent stream.

(107) "Food chain crops" means tobacco, crops grown for human consumption, and crops grown for feed for animals whose products are consumed by humans.

(108) "Fractionation operation" means a distillation operation or method used to separate a mixture of several volatile components of different boiling points in successive stages, each stage removing from the mixture some proportion of one of the components.

(109) "Free liquids" means liquids which readily separate from the solid portion of a waste under ambient temperature and pressure.

(110) "Freeboard" means the vertical distance between the top of a tank or surface impoundment dike and the surface of the waste contained therein.

(111) "Generator" shall have the meaning specified in KRS 224.01-010.

(112) "Governing Body" shall have the same meaning as KRS 224.01-010.

(113) "Groundwater" means the subsurface water occurring in the zone of saturation beneath the water table, and perched water zones below the B-soil horizon, including water circulating through fractures, bedding planes, and solution conduits.

(114) "Groundwater table" means the upper boundary of the saturated zone in which the hydrostatic pressure of the groundwater is equal to the atmospheric pressure.

(115) "Halogenated organic compounds" or "HOCs" means those compounds having a carbon-halogen bond that are listed under 401 KAR 37:110.

(116) "Hazardous constituent" shall have the meaning specified in KRS 224.01.010.



(117) "Hazardous debris" means debris that contains a hazardous waste listed in 401 KAR 31:040 or that exhibits a characteristic of hazardous waste identified in 401 KAR 31:030.

(118) "Hazardous waste" shall have the meaning specified in KRS 224.01-010.

(119) "Hazardous waste constituent" means a constituent which caused the Cabinet to list the hazardous waste in 401 KAR 31:040, or a constituent listed in Section 5(3) of 401 KAR 31:030.

(120) "Hazardous waste management" means the systematic control of the collection, source separation, storage, transportation, processing, treatment, recovery, and disposal of hazardous waste.

(121) "Hazardous waste management unit" is a contiguous area of land on or in which hazardous waste is placed, or the largest area in which there is significant likelihood of mixing hazardous waste constituents in the same area. Examples of hazardous waste management units include a surface impoundment, a waste pile, a land treatment area, a landfill cell, an incinerator, a tank and its associated piping and underlying containment system and a container storage area. A container alone does not constitute a unit; the unit includes containers and the land or pad upon which they are placed. Hazardous waste management units include: aboveground tank; component; existing tank system or existing component; in-ground tank; new tank system or new tank component; on-ground tank; tank system; underground tank; or unfit-for-use tank system.

(122) "Hazardous waste management unit shutdown" means a work practice or operational procedure that stops operation of a hazardous waste management unit or part of a hazardous waste management unit. An unscheduled work practice or operational procedure that stops operation of a hazardous waste management unit or part of a hazardous waste management unit for less than twenty-four (24) hours is not a hazardous waste management unit shutdown. The use of spare equipment and technically feasible bypassing of equipment without stopping operation are not hazardous waste management unit shutdowns.

(123) "Hazardous waste site or facility" means any place at which hazardous waste is treated, stored, or disposed of by landfilling, incineration, or any other method. Hazardous waste site or facility includes: boiler; disposal facility; elementary neutralization unit; incinerator; industrial furnace; hazardous waste transfer facility; injection well; landfill; land treatment facility; miscellaneous unit; pile or waste pile; replacement unit; storage facility; sludge dryer; surface impoundment; tank; thermal treatment facility; totally enclosed treatment facility; treatment facility; or wastewater treatment unit.

(124) "Hazardous waste transfer facility" means any transportation related facility including loading docks, parking areas, storage areas, and other similar areas where shipments of hazardous waste are held during the normal course of transportation.

(125) "Holocene" means the most recent epoch of the quaternary period, extending from the end of the pleistocene to the present.

(126) "Hot well" means a container for collecting condensate as in a steam condenser serving a vacuum-jet or steam-jet ejector.

(127) "Household waste" means any waste material (including garbage, trash, and sanitary wastes in septic tanks) derived from households (including single and multiple residences, hotels and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds, and day-use recreation areas).

(128) "In existence" shall have the same meaning as "existing."

(129) "In gas service" means that the piece of equipment contains or contacts a hazardous waste stream that is in the gaseous state at operating conditions.

(130) "In heavy liquid service" means that the piece of equipment is not in gas service or in vapor service or in light liquid service.

(131) "In light liquid service" means that the piece of equipment contains or contacts a waste stream where the vapor pressure of one (1) or more of the components in the stream is greater than three-tenths (0.3) kilopascals (kPa) at twenty (20) degrees Centigrade, the total concentration of the pure components having a vapor pressure greater than three-tenths (0.3) kPa at twenty (20) degrees Centigrade is equal to or greater than twenty (20) percent by weight, and the fluid is a liquid at operating conditions.

(132) "In operation" refers to a facility which is treating, storing, or disposing of hazardous waste.

(133) "In situ sampling systems" means nonextractive samplers or in-line samplers.

(134) "In vacuum service" means that equipment is operating at an internal pressure that is at least 5 kPa below ambient pressure.

(135) "In vapor service" shall have the same meaning as "in gas service."

(136) "In-ground tank" means a device meeting the definition of "tank" in this section whereby a portion of the tank wall is situated to any degree within the ground, thereby preventing visual inspection of that external surface area of the tank that is in the ground.

(137) "Inactive portion" means that portion of a hazardous waste site or facility which was not operated after November 19, 1980.

(138) "Incinerator" means any enclosed device that:

(a) Uses controlled flame combustion and neither meets the criteria for classification as a boiler, sludge dryer, or carbon regeneration unit, nor is listed as an industrial furnace; or

(b) Meets the definition of infrared incinerator or plasma arc incinerator.

(139) "Incompatible waste" means a hazardous waste which is unsuitable for placement in a particular device or facility because it may cause corrosion or decay of containment materials, or unsuitable for commingling with another waste or material under uncontrolled conditions because the commingling might produce heat or pressure, fire or explosion, violent reaction, toxic dusts, mists, fumes, or gases, or flammable fumes or gases.

(140) "Independently audited" refers to an audit performed by an independent certified public accountant in accordance with generally accepted auditing standards.

(141) "Individual generation site" means the contiguous site at or on which one (1) or more hazardous wastes are generated. An individual generation site, such as a large manufacturing plant, may have one (1) or more sources of hazardous waste but is considered a single or individual generation site if the site or property is contiguous.

(142) "Industrial furnace" means any of the following enclosed devices that are integral components of manufacturing processes and that use thermal treatment to accomplish recovery of materials or energy:

- (a) Cement kilns;
- (b) Lime kilns;
- (c) Aggregate kilns;
- (d) Phosphate kilns;

- (e) Coke ovens;
- (f) Blast furnaces;
- (g) Smelting, melting, and refining furnaces (including pyrometallurgical devices such as cupolas, reverberator furnaces, sintering machines, roasters, and foundry furnaces);
- (h) Titanium dioxide chloride process oxidation reactors;
- (i) Methane reforming furnaces;
- (j) Pulping liquor recovery furnaces;
- (k) Combustion devices used in the recovery of sulfur values from spent sulfuric acid;
- (l) Halogen acid furnaces (HAFs) for the production of acid from halogenated hazardous waste generated by chemical production facilities where the furnace is located on the site of a chemical production facility, the acid product has a halogen acid content of at least three (3) percent, the acid product is used in a manufacturing process, and, except for hazardous waste burned as fuel, hazardous waste fed to the furnace has a minimum halogen content of twenty (20) percent as generated; or

- (m) Other devices as the Cabinet may, after notice and comment, add to this list on the basis of criteria and Section 5 of 401 KAR 30:080.

(143) "Infrared incinerator" means any enclosed device that uses electric powered resistance heaters as a source of radiant heat followed by an afterburner using controlled flame combustion and which is not listed as an industrial furnace.

(144) "Injection well" means a well into which fluids are injected to achieve subsurface emplacement.

(145) "Inner liner" means a continuous layer of material placed inside a tank or container which protects the construction materials of the tank or container from the contained hazardous waste or reagents used to treat the hazardous waste.

(146) "Installation inspector" means a person who, by reason of his knowledge of the physical sciences and the principles of engineering, acquired by a professional education and related practical experience, is qualified to supervise the installation of a hazardous waste management unit including tank systems.

(147) "Interim status" means the designation of a hazardous waste site or facility which was in existence on November 19, 1980, and has submitted a Part A application under 401 KAR Chapter 38 or under 40 C.F.R. Part 270 and is treated as having a permit until final administrative disposition of the application is made.

(148) "Intermittent stream" means a stream or reach of stream that drains a watershed of one (1) square mile or more but does not flow continuously during the calendar year.

(149) "International shipment" means the transportation of hazardous waste into or out of the jurisdiction of the United States.

(150) "Internal floating roof" means a floating roof that rests or floats on the surface (but not necessarily in complete contact with it) of a hazardous waste being managed in a tank that has a fixed roof.

(151) "Karst terrain" means a type of topography where limestone, dolomite or gypsum is present and is characterized by naturally occurring closed topographic depressions or sinkholes, caves, disrupted surface drainage, and well developed underground solution channels formed by dissolution of these rocks by water moving underground.

(152) "Key personnel" shall have the meaning specified in KRS 224.01-010.

(153) "Lab pack" means any large container equal to or smaller than fifty-five (55) gallons that holds many smaller containers of various content tightly secured with packing material.

(154) "Lamp" means the bulb or tube portion of a lighting device specifically designed to produce radiant energy, most often in the ultraviolet (UV), visible, and infra-red (IR) regions of the electromagnetic spectrum. Examples of common lamps include, but is not limited to, incandescent, fluorescent, high pressure sodium, mercury vapor, metal halide, high intensity discharge, and neon lamps.

(155) "Land disposal" shall have the meaning specified in KRS 224.01-010.

(156) "Land treatment facility" means a facility or part of a facility at which hazardous waste is applied onto or incorporated into the soil surface. These facilities are disposal facilities if the waste will remain after closure.

(157) "Landfill" means a disposal facility or part of a facility where hazardous waste is placed in or on land and which is not a pile, a land treatment facility, a surface impoundment, or an underground injection well, a salt dome formation, a salt bed formation, an underground mine, a cave, or a corrective action management unit.

(158) "Landfill cell" means a discrete volume of a hazardous waste landfill which uses a liner to provide isolation of wastes from adjacent cells or wastes. Examples of landfill cells are trenches and pits.

(159) "Large Quantity Handler of Universal Waste" means a universal waste handler who accumulates 5,000 kilograms or more total universal waste (batteries, lamps, pesticides, or thermostats, calculated collectively) at any time. This designation as a large quantity handler of universal waste is retained through the end of the calendar year in which 5,000 kilograms or more total of universal waste is accumulated.

(160) "Leachate" means any liquid including any suspended components in the liquid, that has percolated through or drained from waste.

(161) "Leak-detection system" means a system capable of detecting the failure of either the primary or secondary containment system or the presence of a release of hazardous waste, hazardous waste constituents or accumulated liquid in the secondary containment system. Such a system shall employ operational controls (daily visual inspections for releases into the secondary containment system of aboveground tanks) or consist of an interstitial monitoring device designed to detect continuously and automatically the failure of the primary or secondary containment system or the presence of a release of hazardous waste constituents or accumulated liquids into the secondary containment system.

(162) "Legal defense costs" means any expenses that an insurer incurs in defending against claims of third parties brought under the terms and conditions of an insurance policy.

(163) "Liabilities" means probable future sacrifices of economic benefits arising from present obligations to transfer assets or provide services to other entities in the future as a result of past transactions or events.

(164) "Liner" means a liner designed, constructed, installed, and operated to prevent hazardous waste from passing into the liner at any time during the active life of the facility, or a liner designed, constructed, installed, and operated to prevent hazardous waste from migrating beyond

the liner to adjacent subsurface soil, ground water, or surface water at any time during the active life of the facility.

(165) "Liquid-mounted seal" means a foam or liquid-filled primary seal mounted in contact with the hazardous waste between the tank wall and the floating roof continuously around the circumference of the tank.

(166) "Local government" means the fiscal court of the county, urban-county government, or governing body of an incorporated municipality wherein a hazardous waste landfill or other site or facility for the land disposal of hazardous waste is proposed.

(167) "Major modification" means for hazardous waste sites or facilities, a change in ownership where the Cabinet determines that other changes in the permit are necessary as a result of the change in ownership or operational control, area occupied, disposal method, or other significant change in the operation of a waste site or facility (Note: Minor modifications are described in Section 3 of 401 KAR 38:040).

(168) "Malfunction" means any sudden failure of a control device or a hazardous waste management unit or failure of a hazardous waste management unit to operate in a normal or usual manner, so that organic emissions are increased.

(169) "Manifest" shall have the meaning specified in KRS 224.01-010.

(170) "Manifest document number" means the EPA twelve (12) digit identification number assigned to the generator plus a unique, serially increasing, five (5) digit document number assigned to the manifest by the generator for recordkeeping and reporting purposes.

(171) "Maximum organic vapor pressure" means the equilibrium partial pressure exerted by the hazardous waste contained in a tank determined at the temperature equal to either:

(a) the local maximum monthly average temperature as reported by the National Weather Service when the hazardous waste is stored or treated at ambient temperature; or

(b) the highest calendar-month average temperature of the hazardous waste when the hazardous waste is stored at temperatures above the ambient temperature or when the hazardous waste is stored or treated at temperatures below the ambient temperature.

(172) "Mining overburden returned to the mine site" means any material overlying an economic mineral deposit which is removed to gain access to that deposit and is then used for reclamation of a surface mine.

(173) "Miscellaneous unit" means a hazardous waste management unit where hazardous waste is treated, stored, or disposed of, and that is not a container, tank, surface impoundment, pile, land treatment unit, landfill, incinerator, boiler, industrial furnace, underground injection well with appropriate technical standards under 40 C.F.R. Part 146, containment building, corrective action management unit, or unit eligible for a research, development, and demonstration permit under Section 6 of 401 KAR 38:060.

(174) "Monitoring" means the act of systematically inspecting and collecting data on operational parameters or on the quality of the air, soil, groundwater, or surface water.

(175) "Monitoring well" means a well used to obtain water samples for water quality and quantity analysis and groundwater levels.

(176) "Movement" means that hazardous waste transported to a facility in an individual vehicle.

(177) "Net working capital" means current assets minus current liabilities.

(178) "Net worth" means total assets minus total liabilities and is equivalent to owner's equity.

(179) "New Facility" means any hazardous waste site or facility that commenced construction after November 19, 1980.

(180) "New tank component" shall have the same meaning as "new tank system."

(181) "New tank system" means a tank system or component that will be used for the storage or treatment of hazardous waste and for which installation commenced after July 14, 1986; however, for purposes of Section 4(7)(b) of 401 KAR 34:190 and Section 4(7)(b) of 401 KAR 35:190, a new tank system is one for which construction commenced after July 14, 1986.

(182) "No detectable organic emissions" means no escape of organics from a device or system to the atmosphere as determined by an instrument reading less than 500 parts per million by volume (ppmv) above the background level at each joint, fitting, and seal when measured in accordance with the requirements of Method 21 in 40 C.F.R. Part 60, Appendix A, and by no visible openings or defects in the device or system such as rips, tears, or gaps.

(183) "Nonsudden accidental occurrence" means an occurrence that takes place over time and involves continuous or repeated exposure.

(184) "Nonwastewaters" means wastes that do not meet the criteria for wastewaters found in the definition for wastewaters.

(185) "Not detected" means at or below the lower method calibration limit (MCL) in SW-846, Method 8290, Table 1.

(186) "Off-site" means properties noncontiguous to the site.

(187) "On-site" means on the same or geographically contiguous property which may be divided by public or private right-of-way, provided the entrance and exit between the properties is at a crossroads intersection, and access is by crossing, as opposed to going along the right-of-way. Noncontiguous properties owned by the same person but connected by a right-of-way which he controls and to which the public does not have access is also considered on-site property.

(188) "Onground Tank" means a devise meeting the definition of tank that is situated in such a way that the bottom of the tank is on the same level as the adjacent surrounding surface so that the external tank bottom cannot be visually inspected.

(189) "Open burning" means the combustion of any material or solid waste without:

- (a) Control of combustion air to maintain adequate temperature for efficient combustion;
- (b) Containment of the combustion reaction in an enclosed device to provide sufficient residence time and mixing for complete combustion; and
- (c) Control of emission of the gaseous combustion products.

(190) "Open-ended valve or line" means any valve, except pressure relief valves, having one (1) side of the valve seat in contact with process fluid and one (1) side open to the atmosphere, either directly or through open piping.

(191) "Operational plan" means the approved plan of operations filed with the Cabinet which describes the method of operation that the permittee will use in the treatment, storage, or disposal of wastes.

(192) "Operator" means any person responsible for overall operation of an on-site or off-site waste facility, including any private contractor conducting operational activities at a federal facility.

(193) "Other site or facility for the land disposal of hazardous waste" means a disposal facility but shall not include a storage facility or a treatment facility.

(194) "Owner" means any person who owns an on-site or off-site waste facility, or any part of a facility.

(195) "Parent corporation" means a corporation which directly owns at least fifty (50) percent of the voting stock of the corporation which is the facility owner or operator; the latter corporation is deemed a "subsidiary" of the parent corporation.

(196) "Part A of the application" or "Part A" means the standard forms or format for applying for a hazardous waste site or facility permit as required in 401 KAR 38:080.

(197) "Part B of the application" or "Part B" means the standard format for applying for a hazardous waste site or facility permit as required in 401 KAR 38:090 to 401 KAR 38:210.

(198) "Partial closure" means the closure of a hazardous waste management unit in accordance with the applicable closure requirements of 401 KAR Chapters 34 and 35 at a facility that contains other active hazardous waste management units. For example, partial closure may include the closure of a tank (including its associated piping and underlying containment systems), landfill cell, surface impoundment, waste pile, or other hazardous waste management unit, while other units of the same facility continue to operate.

(199) "Perennial stream" means a stream or that part of a stream that flows continuously during all of the calendar year as a result of groundwater discharge or surface run-off. The term does not include "intermittent stream" or "ephemeral stream".

(200) "Permit" means the authorization or other control document issued by the Cabinet to implement the requirements of the waste management administrative regulations. The term permit includes permit-by-rule, registered permit-by-rule, research, development, and demonstration permit, and emergency permit. However, the term permit does not include draft permit or proposed permit.

(201) "Permit by rule" means authorization allowing certain classes of sites or facilities to manage waste consistent with 401 KAR Chapters 30 to 49, without submission of a registration or permit application to the Cabinet. Examples of hazardous waste sites or facilities which are permitted by rule include facilities operating under an interim status permit and facilities identified in Section 1 of 401 KAR 38:060.

(202) "Permittee" means any person holding a valid permit issued by the Cabinet to manage, treat, store, or dispose of waste.

(203) "Person" shall have the meaning specified in KRS 224.01-010.

(204) "Personnel" or "facility personnel" means all persons who work at or oversee the operations of a waste facility, and whose actions or failure to act may result in noncompliance with the requirements of the waste management administrative regulations.

(205) "Pesticide" means any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest, or intended for use as a plant regulator, defoliant, or desiccant, other than any article that:

(a) Is a new animal drug under FFDCA section 201(w), or

(b) Is an animal drug that has been determined by regulation of the Secretary of Health and Human Services not to be a new animal drug, or

(c) Is an animal feed under FFDCA section 201(x) that bears or contains any substances described by paragraph (a) or (b) of this subsection.

(206) "Pile" or "waste pile" means any noncontainerized accumulation of solid, nonflowing hazardous waste that is used for treatment or storage and that is not a containment building.

(207) "Plasma arc incinerator" means any enclosed device using a high intensity electrical discharge or arc as a source of heat followed by an afterburner using controlled flame combustion and which is not listed as an industrial furnace.

(208) "Point of compliance" means for hazardous waste site and facilities, groundwater monitoring wells located within 250 feet of the waste boundary as approved by the Cabinet.

(209) "Point of waste origination" means as follows:

(a) When the facility owner or operator is the generator of the hazardous waste, the point of waste origination means the point where a solid waste produced by a system, process, or waste management unit is determined to be a hazardous waste as identified in 401 KAR Chapter 31.

(b) When the facility owner and operator are not the generator of the hazardous waste, point of waste origination means the point where the owner or operator accepts delivery or takes possession of the hazardous waste.

(210) "Point of waste treatment" means the point where a hazardous waste exits a waste management unit used to destroy, degrade, or remove organics in the hazardous waste.

(211) "Point source" means any discernible, confined, and discrete conveyance including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, vessel or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture.

(212) "Pollutant" shall have the same meaning as KRS 224.01-010.

(213) "Polychlorinated biphenyls" or "PCB" means halogenated organic compounds defined in accordance with 40 C.F.R. 761.2 as of July 1989.

(214) "Postclosure care" means the manner in which a facility shall be maintained when it no longer accepts waste for disposal.

(215) "Postclosure monitoring and maintenance" shall have the meaning specified in KRS 224.01-010.

(216) "Postclosure plan" means the plan for postclosure care prepared in accordance with the requirements of Sections 8 to 11 of 401 KAR 34:070 or Sections 8 to 11 of 401 KAR 35:070.

(217) "Pressure release" means the emission of materials resulting from the system pressure being greater than the set pressure of the pressure relief device.

(218) "Primary exporter" means any person who is required to originate the manifest for a shipment of hazardous waste in accordance with Section 1 of 401 KAR 32:020 which specifies a treatment, storage, or disposal facility in a receiving country as the facility to which the hazardous waste will be sent and any intermediary arranging for the export.

(219) "Process heater" means a device that transfers heat liberated by burning fuel to fluids contained in tubes, including all fluids except water that are heated to produce steam.

(220) "Process vent" means any open-ended pipe or stack that is vented to the atmosphere either directly, through a vacuum-producing system, or through a tank (distillate receiver, condenser, bottoms receiver, surge control tank, separator tank, or hot well) associated with hazardous waste distillation fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operations.



(221) "Property damage" shall have the meaning given by applicable Kentucky statutes. Property damage does not include those liabilities which, consistent with the standard industry practices, are excluded from coverage in liability policies for property damage.

(222) "Proposed permit" means a document prepared by the Cabinet indicating the Cabinet's tentative decision to issue or deny, modify, revoke or terminate a permit.

(223) "Publicly owned treatment works" or "POTW" shall have the meaning specified in KRS 224.01-010.

(224) "Pump operating level" is a liquid level proposed by the owner or operator and approved by the based on pump activation level, sump dimensions, and level that avoids backup into the drainage layer and minimizes head in the sump.

(225) "Qualified groundwater scientist" means a geologist registered in Kentucky who has received a baccalaureate or postgraduate degree in the natural sciences or engineering, and has sufficient training and experience in groundwater hydrology and related fields to enable that individual to make sound professional judgments regarding groundwater monitoring and contaminant fate and transport.

(226) "Receiving country" means a foreign country to which a hazardous waste is sent for the purpose of treatment, storage or disposal (except short-term storage incidental to transportation).

(227) "Recharge zone" means an area supplying the water which enters an underground drinking water source.

(228) "Reclaimed" means a material that is processed to recover a usable product, or that is regenerated. Examples are recovery of lead values from spent batteries and regeneration of spent solvents.

(229) "Recovered material" shall have the meaning specified in KRS 224.01-010.

(230) "Recyclable materials" means hazardous wastes that are recycled.

(231) "Recycled" means a material that is used, reused, or reclaimed.

(232) "Recycling" shall have the meaning specified in KRS 224.01-010.

(233) "Regional integrated waste treatment and disposal demonstration facility" shall have the meaning specified in KRS 224.01-010.

(234) "Regulated unit" means hazardous waste land disposal sites or facilities, or portions of existing hazardous waste land disposal sites or facilities that continued to receive waste after January 26, 1983.

(235) "Remediation waste" means all solid and hazardous wastes, and all media (including groundwater, surface water, soils, and sediments) and debris, which contain listed hazardous wastes or which themselves exhibit a hazardous waste characteristic, that are managed for the purpose of implementing corrective action requirements under Section 12 of 401 KAR 34:060 and KRS 224.46-520. For a given facility, remediation wastes may originate only from within the facility boundary, but may include waste managed in implementing KRS 224.46-520 for releases beyond the facility boundary.

(236) "Repaired" means that equipment is adjusted, or otherwise altered, to eliminate a leak.

(237) "Replacement unit" means a landfill, surface impoundment, or waste pile unit from which all or substantially all of the waste is removed, and that is subsequently reused to treat, store, or dispose of hazardous waste. "Replacement unit" does not apply to a unit from which waste is removed during closure, if the subsequent reuse solely involves the disposal of waste from that unit

and other closing units or corrective action areas at the facility, in accordance with an approved closure plan or approved corrective action.

(238) "Representative sample" means a sample of a universe or whole (for example, waste pile, lagoon, or groundwater) which can be expected to exhibit the average properties of the universe or whole.

(239) "Research, development, and demonstration permit" means a permit issued by the Cabinet for a hazardous waste treatment facility that utilizes an innovative and experimental hazardous waste treatment technology or process for which permit standards for such experimental activity have not been promulgated under 401 KAR Chapters 34 through 36.

(240) "Resource recovery" means the recovery of material or energy from waste.

(241) "Run-off" means any rainwater, leachate, or other liquid that drains overland from any part of a facility.

(242) "Run-on" means any rainwater, leachate, or other liquid that drains overland onto any part of a facility.

(243) "Saturated zone" shall have the same meaning as "zone of saturation".

(244) "Schedule of compliance" means a schedule of remedial measures included in a permit or Cabinet order, including an enforceable sequence of interim requirements (for example, actions, operations, or milestone events) leading to compliance with KRS Chapter 224 and 401 KAR Chapters 30 to 49.

(245) "Scrap metal" is bits and pieces of metal parts (for example, bars, turnings, rods, sheets, or wire) or metal pieces that may be combined together with bolts or soldering (for example, radiators, scrap automobiles, or railroad boxcars), which when worn or superfluous can be recycled.

(246) "Secretary" shall have the meaning specified in KRS 224.01-010.

(247) "Sensor" means a device that measures a physical quantity or the change in a physical quantity or the change in a physical quantity, such as temperature, pressure, flow rate, pH, or liquid level.

(248) "Separator tank" means a device used for separation of two immiscible liquids.

(249) "Sewage system" shall have the meaning specified in KRS 224.01-010.

(250) "Site" means the land or water area where any facility or activity is physically located or conducted, including adjacent land used in connection with the waste facility or activity.

(251) "Sludge" means any solid, semisolid, or liquid waste generated from a municipal, commercial, or industrial wastewater treatment plant, water supply treatment plant, or air pollution control facility exclusive of the treated effluent from a wastewater treatment plant or any other waste having similar characteristics and effects.

(252) "Sludge dryer" means any enclosed thermal treatment device that is used to dehydrate sludge and that has a maximum total thermal input, excluding the heating value of the sludge itself, of 2,500 BTU per pound of sludge treated on a wet-weight basis.

(253) "Small quantity generator" means a generator who generates more than 100 kilograms but less than 1000 kilograms of hazardous waste in a calendar month.

(254) "Small Quantity Handler of Universal Waste" means a universal waste handler who does not accumulate more than 5,000 kilograms of universal waste (batteries, lamps, pesticides, or thermostats, calculated collectively) at any time.

(255) "Solid waste management unit" shall mean any discernible unit at which solid wastes have been placed at any time, irrespective of whether the unit was intended for the management of solid or hazardous waste. Such units include any area at a facility at which solid wastes have been routinely and systematically released.

(256) "Solvent extraction operation" means an operation or method of separation in which a solid or solution is contacted with a liquid solvent (the two (2) being mutually insoluble) to preferentially dissolve and transfer one (1) or more components into the solvent.

(257) "Sorb" means to either adsorb, absorb, or both.

(258) "Sorbent" means a material that is used to soak up free liquids by either adsorption or absorption, or both.

(259) "Spent material" is any material that has been used and as a result of contamination can no longer serve the purpose for which it was produced without processing.

(260) "Spill" means any accidental spilling, leaking, pumping, pouring, emitting, or dumping of hazardous wastes or materials which, when spilled, become hazardous wastes into or on any land or water.

(261) "Start-up" means the setting in operation of a hazardous waste management unit or control device for any purpose.

(262) "State" means any of the fifty (50) states, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, American Samoa, the Northern Mariana Islands or Guam but does not include any foreign country.

(263) "Steam stripping operation" means a distillation operation in which vaporization of a volatile constituents of a liquid mixture takes place by the introduction of steam directly into the charge.

(264) "Storage" shall have the meaning specified in KRS 224.01-010.

(265) "Storage facility" means a facility or part of a facility at which hazardous waste is held for a temporary period, at the end of which the hazardous waste is treated, disposed of, or stored elsewhere. A generator who accumulates his own hazardous wastes in an approved manner for less than ninety (90) days for subsequent transport on site or off site is not operating or maintaining a storage facility.

(266) "Storage of hazardous waste" means the holding of hazardous waste for a temporary period, at the end of which the hazardous waste is treated, disposed, or stored elsewhere.

(267) "Substantial business relationship" means the extent of a business relationship necessary to make a guarantee contract issued incident to that relationship valid and enforceable. A "substantial business relationship" shall arise from a pattern of recent or ongoing business transactions, in addition to the guarantee itself, such that a currently existing business relationship between the guarantor and the owner or operator is demonstrated to the satisfaction of the Cabinet.

(268) "Sudden accidental occurrence" means an occurrence which is not continuous or repeated in nature.

(269) "Sump" means any pit or reservoir that meets the definition of tank, and those troughs and trenches connected to it, that serves to collect hazardous waste for transport to hazardous waste storage, treatment, or disposal facilities; except that as used in the landfill, surface impoundment, and waste pile administrative regulations, "sump" means any lined pit or reservoir that serves to

collect liquids drained from a leachate collection and removal system or leak detection system for subsequent removal from the system.

(270) "Surface impoundment" means a facility or part of a facility which is a natural topographic depression, manmade excavation, or diked area formed primarily of earthen materials (although it may be lined with manmade materials), which is designed to hold an accumulation of liquid wastes or wastes containing free liquids, and which is not an injection well. Examples of surface impoundments are holding, storage, settling, and aeration pits, ponds, and lagoons.

(271) "Surge control tank" means a large-sized pipe or storage reservoir sufficient to contain the surging liquid discharge of the process tank to which it is connected.

(272) "Tangible net worth" means the tangible assets that remain after deducting liabilities; these assets would not include intangibles such as goodwill and rights to patents or royalties.

(273) "Tank" means a stationary device designed to contain an accumulation of hazardous waste that is constructed primarily of nonearthen materials (for example, wood, concrete, steel, or plastic) which provide structural support and which does not meet the definition of any other unit.

(274) "Tank system" means a hazardous waste storage or treatment tank and its associated ancillary equipment and containment system.

(275) "Termination" shall have the meaning specified in KRS 224.01-010.

(276) "The full amount of the liability coverage to be provided" means the amount of coverage for sudden and nonsudden occurrences required to be provided by the owner or operator, less the amount of financial assurance for liability coverage that is being provided by other financial assurance mechanisms being used to demonstrate financial assurance by the owner or operator.

(277) "Thermal treatment" means the treatment of hazardous waste in a device which uses elevated temperatures as the primary means to change the chemical, physical, or biological character or composition of the hazardous waste. Examples of thermal treatment processes are incineration, molten salt, pyrolysis, calcination, wet air oxidation, and microwave discharge (see also "incinerator" and "open burning").

(278) "Thermal treatment facility" means a facility or part of a facility which uses elevated temperatures as the primary means to change the chemical, physical or biological character or composition of hazardous waste. Examples of thermal treatment processes are incineration, molten salt, pyrolysis, calcination, wet air oxidation, and microwave discharge.

(279) "Thermostat" means a temperature control device that contains metallic mercury in an ampule attached to a bimetal sensing element, and mercury-containing ampules that have been removed from these temperature control devices in compliance with the requirements of Section 4(3)(b) of 401 KAR 43:020 or Section 4(3)(b) of 401 KAR 43:030.

(280) "Thin-film evaporation operation" means a distillation operation that employs a heating surface consisting of a large diameter tube that may be either straight or tapered, horizontal or vertical. Liquid is spread on the tube wall by a rotating assembly of blades that maintain a close clearance from the wall or actually ride on the film of liquid on the wall.

(281) "Totally enclosed treatment facility" means a facility for the treatment of hazardous waste which is directly connected to an industrial production process and which is constructed and operated in a manner which prevents the release of any hazardous waste or any constituent thereof into the environment during treatment. An example is a pipe in which acid is neutralized.

(282) "Transit country" means any foreign country, other than a receiving country, through which a hazardous waste is transported.

(283) "Transport vehicle" means a motor vehicle or rail car used for the transportation of cargo by any mode. Each cargo-carrying body is a separate transport vehicle.

(284) "Transportation" shall have the meaning specified in KRS 224.01-010.

(285) "Transporter" means a person engaged in the off-site transportation of hazardous waste by air, rail, highway or water.

(286) "Treatability study" means :

(a) A study in which a hazardous waste is subjected to a treatment process to determine:

1. Whether the waste is amenable to the treatment process;
2. What pretreatment, if any, is required;
3. The optimal process conditions needed to achieve the desired treatment;
4. The efficiency of a treatment process for a specific waste or wastes; or
5. The characteristics and volumes of residuals from a particular treatment process.

(b) For the purpose of 401 KAR 31:010, Section 4(5) and (6), exemptions are liner compatibility, corrosion, and other material compatibility studies and toxicological and health effects studies.

(c) A "treatability study" is not a means to commercially treat or dispose of hazardous waste.

(287) "Treatment" shall have the meaning specified in KRS 224.01-010.

(288) "Treatment facility" means a facility or part of a facility using any method, technique or process, including neutralization, designed to change the physical, chemical, or biological character or composition of any hazardous waste so as to neutralize such waste, or so as to recover energy or material resources from the waste, or so as to render such waste nonhazardous or less hazardous; safer to transport, store, or dispose of; or amenable for recovery, amenable for storage, or reduced in volume.

(289) "Treatment zone" means a soil area of the unsaturated zone of a land treatment unit within which hazardous constituents are degraded, transformed, or immobilized.

(290) "Underground drinking water source" means:

(a) An aquifer supplying drinking water for human consumption; or

(b) An aquifer in which the groundwater contains less than 10,000 mg/l total dissolved solids.

(291) "UIC Well" means a underground injection control well as provided in 40 C.F.R. Part 144.

(292) "Underground injection" means the subsurface emplacement of fluids through a bored, drilled, or driven well; or through a dug well, where the depth of the dug well is greater than the largest surface dimension. (See also "injection well".)

(293) "Underground tank" means a device meeting the definition of "tank" in this section whose entire surface area is totally below the surface of and covered by the ground.

(294) "Underlying hazardous constituent" means any constituent listed in Section 1 of 401 KAR 37:040, Table - Treatment Standards for Hazardous Wastes, except vanadium and zinc, which can reasonably be expected to be present at the point of generation of the hazardous waste, at a concentration above the constituent-specific treatment standards.

(295) "Unfit-for-use tank system" means a tank system that has been determined through an integrity assessment or other inspection to be no longer capable of storing or treating hazardous waste without posing a threat of release of hazardous waste to the environment.

(296) "Universal Waste" means any of the following hazardous wastes that are subject to the universal waste requirements of 401 KAR Chapter 43:

- (a) Batteries as described in Section 2 of 401 KAR 43:010;
- (b) Pesticides as described in Section 3 of 401 KAR 43:010;
- (c) Thermostats as described in Section 4 of 401 KAR 43:010; and
- (d) Spent Lamps as described in Section 5 of 401 KAR 43:010.

(297) "Universal Waste Handler":

- (a) Means:
  - 1. A generator of universal waste; or
  - 2. The owner or operator of a facility, including all contiguous property, that receives universal waste from other universal waste handlers, accumulates universal waste, and sends universal waste to another universal waste handler, to a destination facility, or to a foreign destination.

(b) Does not mean:

- 1. A person who treats (except under the provisions of Sections 4(1) or (3) of 401 KAR 43:020 or Sections 4(1) or (3) of 401 KAR 43:030), disposes of, or recycles universal waste; or
- 2. A person engaged in the off-site transportation of universal waste by air, rail, highway, or water, including a universal waste transfer facility.

(298) "Universal Waste Transfer Facility" means any transportation-related facility including loading docks, parking areas, storage areas and other similar areas where shipments of universal waste are held during the normal course of transportation for ten days or less.

(299) "Universal Waste Transporter" means a person engaged in the off-site transportation of universal waste by air, rail, highway, or water.

(300) "Unsaturated zone" shall have the same meaning as "Zone of aeration".

(301) "Uppermost aquifer" means the geologic formation nearest the natural ground surface that is an aquifer, as well as lower aquifers that are hydraulically interconnected with this aquifer within the facility's property boundary.

(302) "Used oil" shall have the same meaning as KRS 224.50-545.

(303) "Used or reused" means a material that is either:

(a) Employed as an ingredient (including use as an intermediate) in an industrial process to make a product (for example, distillation bottoms from one (1) process used as feedstock in another process). However, a material shall not satisfy this condition if distinct components of the material are recovered as separate end products (as when metals are recovered from metal-containing secondary materials); or

(b) Employed in a particular function or application as an effective substitute for a commercial product (for example, spent pickle liquor used as phosphorous precipitant and sludge conditioner in wastewater treatment).

(304) "Vapor incinerator" means any enclosed combustion device that is used for destroying organic compounds and does not extract energy in the form of steam or process heat.

(305) "Vapor recovery system" means that equipment, device, or apparatus capable of collecting vapors and gases discharged from a storage tank, and a vapor processing system capable of affecting such vapors and gases so as to prevent their emission into the atmosphere.

(306) "Vapor-mounted seal" means a foam-filled primary seal mounted continuously around the circumference of the tank so that there is an annular vapor space underneath the seal. The annular vapor space is bounded by the bottom of the primary seal, the tank wall, the hazardous waste surface, and the floating roof.

(307) "Vented" means discharged through an opening, typically an open-ended pipe or stack, allowing the passage of a stream of liquids, gases, or fumes into the atmosphere. The passage of liquids, gases, or fumes is caused by mechanical means such as compressors or vacuum-producing systems or by process-related means such as evaporation produced by heating and not caused by tank loading and unloading (work losses) or by natural means such as diurnal temperature changes.

(308) "Vessel" means any watercraft used or capable of being used as a means of transportation on the water.

(309) "Volatile organic concentration" or "VO concentration" means the fraction by weight of organic compounds in a hazardous waste expressed in terms of parts per million (ppmw) as determined by direct measurement using Method 25D or by knowledge of the waste in accordance with the requirements of Section 4 of 401 KAR 35:281.

(310) "Washout" means the carrying away of waste by waters as a result of flooding.

(311) "Waste" shall have the meaning specified in KRS 224.01-010.

(312) "Waste boundary" means the outermost perimeter of the waste (projected in the horizontal plane) as it would exist at completion of the disposal activity.

(313) "Waste determination" means performing all applicable procedures in accordance with the requirements of Section 4 of 401 KAR 35:281 to determine whether a hazardous waste meets standards specified in 401 KAR Chapter 35. Examples of a waste determination include performing the procedures in accordance with the requirements of Section 4 of 401 KAR 35:281 to determine the average VO concentration of a hazardous waste at the point of waste origination; the average VO concentration of a hazardous waste at the point of waste treatment and comparing the results to the exit concentration limit specified for the process used to treat the hazardous waste; determining the organic reduction efficiency and the organic biodegradation efficiency for a biological process used to treat a hazardous waste and comparing the results to the applicable standards; or the maximum volatile organic vapor pressure for a hazardous waste in a tank and comparing the results to the applicable standards.

(314) "Waste pile" shall have the same meaning as "pile".

(315) "Waste stabilization process" means any physical or chemical process used to either reduce the mobility of hazardous constituents in a hazardous waste or eliminate free liquids as determined by Test Method 9095 (Paint Filter Liquids Test) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication No. SW-846, (incorporated in 40 CFR 260.11, which is adopted in Section 3 of 401 KAR 30:010). A waste stabilization process includes mixing the hazardous waste with binders or other materials, and curing the resulting hazardous waste and binder mixture. Other synonymous terms used to refer to this process are "waste fixation" or "waste solidification."

(316) "Wastewaters" means wastes that contain less than one (1) percent by weight total organic carbon (TOC) and less than one (1) percent by weight total suspended solids (TSS), with the following exceptions:

(a) F001, F002, F003, F004, F005, wastewaters are solvent-water mixtures that contain less than one (1) percent by weight TOC or less than one (1) percent by weight total F001, F002, F003, F004, F005 solvent constituents listed in Section 1 of 401 KAR 37:040 in Table Treatment Standards for Hazardous Waste;

(b) K011, K013, K014 wastewaters contain less than five (5) percent by weight TOC and less than one (1) percent by weight TSS, as generated; and

(c) K103 and K104 wastewaters contain less than four (4) percent by weight TOC and less than one (1) percent by weight TSS.

(317) "Wastewater treatment unit" means a device that:

(a) Is part of a wastewater treatment facility that is subject to administrative regulation under either section 402 or 307(b) of the CWA;

(b) Receives and treats or stores an influent wastewater which is a hazardous waste as defined in 401 KAR 31:010, Section 3; or generates and accumulates a wastewater treatment sludge that is a hazardous waste as defined in 401 KAR 31:010, Section 3; or treats or stores a wastewater treatment sludge which is a hazardous waste as defined in Section 3 of 401 KAR 31:010; and

(c) Meets the definition of tank or tank system in this administrative regulation.

(318) "Water" or "Waters of the Commonwealth" shall have the meaning specified in KRS 224.01-010.

(319) "Water (bulk shipment)" means the bulk transportation of hazardous waste which is loaded or carried on board a vessel without containers or labels.

(320) "Well" means any shaft or pit dug or bored into the earth, generally of cylindrical form, and often walled with bricks or tubing to prevent the earth from caving in.

(321) "Wetlands" means land that has a predominance of hydric soils and is inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances does support, a prevalence of hydrophytic vegetation typically adapted for life in saturated soil conditions.

(322) "Zone of aeration" means that region of the soil or rock between the land surface and the nearest saturated zone in which the interstices are occupied partially by air.

(323) "Zone of engineering control" means an area under the control of the owner or operator that upon detection of a hazardous waste release, can be readily cleaned up prior to the release of hazardous waste or hazardous constituents to waters of the Commonwealth.

(324) "Zone of saturation" means that part of the earth's crust containing groundwater in which all voids, large and small, are filled with liquid.

**Section 2. Acronyms and Abbreviations.** Unless otherwise specifically indicated by context, acronyms and abbreviations used in 401 KAR Chapter 31 shall have the meaning as identified in Table 1 of this administrative regulation.



Table 1. Acronyms and Abbreviations

Am.	Amended
C	Corrosive waste
CAA	Clean Air Act, as amended
C.F.R.	Code of Federal Regulations
cm	Centimeter
cm <sup>2</sup>	Centimeter squared
CO	Carbon monoxide
CO <sub>2</sub>	Carbon dioxide
CWA	Clean Water Act, as amended
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act of 1980
DOT	United States Department of Transportation
DRE	Destruction and removal efficiency
E	Explosive waste
eff.	Effective
EPA	United States Environmental Protection Agency
FIFRA	Federal Insecticide, Fungicide, and Rodenticide Act
FIA	Federal Insurance Administration
FR	Federal Register
H	Acutely hazardous waste
ha	Hectare
HTMR	High temperature metals recovery
HSWA	Hazardous and Solid Waste Amendments of 1994
I	Ignitable waste
KAR	Kentucky Administrative Regulation
kg	Kilogram
KPDES	Kentucky Pollution Discharge Elimination System
KRS	Kentucky Revised Statute
Ky.R.	Administrative Register of Kentucky
l	Liter
LC	Lethal concentration
LD	Lethal dose
ml	Milliliter
mm	Millimeter
N	Normal
NESHAPS	National Emissions Standards for Hazardous Air Pollutants
NPDES	National Pollutant and Discharge Elimination System
PCB	Polychlorinated biphenyl
pCi/l	Picocuries per liter
PHC	Principal hazardous constituent
Permit POHC	Permitted principal organic hazardous constituent

PM	Particulate matter
POHC	Principal organic hazardous constituent
ppm	parts per million
Trial POHC	Trial burn principal organic hazardous constituent
POTW	Publicly owned treatment works
PSD	Prevention of significant deterioration
psi	Pounds per square inch
psig	Pounds per square inch gauge
R	Reactive waste
RCRA	Resource Conservation and Recovery Act, as amended
SDWA	Safe Drinking Water Act, as amended
SEC	Securities and Exchange Commission
SIC	Standard Industrial Classification Code
SPCC	Spill Prevention, Control, and Countermeasures Plan
T	Toxic waste
UIC	Underground Injection Control
UICP	Underground Injection Control Program
U.S.C.	United States Code
U.S. EPA	United States Environmental Protection Agency
USGS	United States Geological Survey
USPS	United States Postal Service

Effective Date - March 12, 1997

**401 KAR 38:010. General Provisions for Permitting.**

**RELATES TO:** KRS 224.01, 224.10, 224.40, 224.43, 224.46, 224.99, 40 CFR 270 Subpart A

**STATUTORY AUTHORITY:** KRS 224.10-100, 224.46-520, 224.46-530

**NECESSITY AND FUNCTION:** To implement provisions of KRS 224.46-520 and 224.46-530 to establish general provisions for hazardous waste permitting.

**Section 1. Scope of the Permit Requirements.**

(1) The hazardous waste permit program has separate additional administrative regulations that contain technical requirements. These separate administrative regulations are used by permit issuing authorities to determine what requirements shall be placed in permits if they are issued. These separate administrative regulations are located in 401 KAR 30:020 and Chapters 34 and 35.

(2) KRS 224.46-520 requires a permit for the "treatment," "storage," and "disposal" of any "hazardous waste" as identified or listed in 401 KAR Chapter 31. The terms "treatment", "storage", "disposal" and "hazardous waste" are defined in 401 KAR 38:005. Owners or operators of hazardous waste management units shall have permits during the active life (including the closure period) of the unit. Owners or operators of surface impoundments, landfills, land treatment units, and waste pile units that received wastes after July 26, 1982, or that certified closure (according to Section 6 of 401 KAR 35:070) after January 26, 1983, shall have postclosure permits, unless they demonstrate closure by removal as provided under paragraphs (e) and (f) of this subsection. If a postclosure permit is required, the permit shall address applicable 401 KAR Chapter 34 groundwater monitoring, unsaturated zone monitoring, corrective action and postclosure care requirements. The denial of a permit for the active life of a hazardous waste management facility or unit does not affect the requirement to obtain a postclosure permit under this section.

(a) Specific inclusions. Owners or operators of certain facilities require hazardous waste site or facility permits as well as permits under other programs for certain aspects of the facility operation. Hazardous waste site or facility permits are required for:

1. Injection wells that dispose of hazardous waste, and associated surface facilities that treat, store, or dispose of hazardous waste (see Section 5 of 401 KAR 38:060). However, the owner or operator with a UIC permit issued by the Cabinet under an approved or promulgated UIC program, or by EPA, shall be deemed to have a permit for the injection well itself if they comply with the requirements of Section 1(2) of 401 KAR 38:060 (permit by rule for injection wells).

2. Treatment, storage, or disposal of hazardous waste at facilities requiring an NPDES permit or KPDES permit when the Cabinet program is approved by EPA. However, owners or operators of a publicly owned treatment works receiving hazardous waste shall be deemed to have a permit for that waste if they comply with the applicable requirements of Section 1(3) of 401 KAR 38:060 (permit by rule for POTW's).

3. Barges or vessels that dispose of hazardous waste by ocean disposal and onshore hazardous waste treatment, or storage facilities associated with an ocean disposal operation. However, owners or operators shall be deemed to have a permit for ocean disposal for the barge or vessel itself if they comply with the requirements of Section 1(1) of 401 KAR 38:060 (permit by rule for ocean disposal barges and vessels).

(b) Specific exclusions. The following persons are among those who are not required to obtain a hazardous waste site or facility permit:

1. Generators who accumulate hazardous waste on-site for less than the time periods provided in Section 5 or 6 of 401 KAR 32:030 or in accordance with the standards in Section 5(6) of 401 KAR 31:010.

2. Farmers who dispose of hazardous waste pesticides from their own use as provided in Section 10 of 401 KAR 32:050.

3. Persons who own or operate facilities solely for the treatment, storage, or disposal of hazardous waste excluded from administrative regulations under this chapter by Section 4 of 401 KAR 31:010 except as provided in 401 KAR 38:060.

4. Owners or operators of totally enclosed treatment facilities as defined in 401 KAR 38:005.

5. Owners or operators of elementary neutralization units or of waste water treatment units as defined in 401 KAR 38:005 except as provided in Section 1(4) and (5) of 401 KAR 38:060.

6. Transporters storing manifested shipments of hazardous waste in containers meeting the requirements of Section 1 of 401 KAR 32:030, at a transfer facility for a period of ten (10) days or less.

7. Persons adding absorbent material to waste in a container (as defined in Section 1 of 401 KAR 38:005) and persons adding waste to absorbent material in a container provided that these actions occur at the time waste is first placed in the container; and Section 8(2) of 401 KAR 34:020, and Sections 2 and 3 of 401 KAR 34:180 are complied with.

8. Universal waste handlers and universal waste transporters managing the wastes listed below. These handlers are subject to regulation under 401 KAR Chapter 43, when handling the below listed universal wastes.

a. Batteries as described in Section 2 of 401 KAR 43:010;

b. Pesticides as described in Section 3 of 401 KAR 43:010;

c. Thermostats as described in Section 4 of 401 KAR 43:010; and

d. Spent mercury containing lamps as described in Section 5 of 401 KAR 43:010.

9. Generators who treat hazardous waste on site in accordance with Section 6 of 401 KAR 32:030.

(c) Further exclusions.

1. A person is not required to obtain a hazardous waste permit for treatment or containment activities taken during immediate response to any of the following situations:

a. A discharge of a hazardous waste;

b. An imminent and substantial threat of a discharge of hazardous waste;

c. A discharge of a material which, when discharged, becomes a hazardous waste.

2. Any person who continues or initiates hazardous waste treatment or containment activities after the immediate response is over is subject to all applicable requirements of this chapter for those activities.

(d) Permits for less than an entire facility. The Cabinet may issue or deny a permit for one (1) or more units at a facility without simultaneously issuing or denying a permit to all of the units at the facility. The interim status of any unit for which a permit has not been issued or denied is not affected by the issuance or denial of a permit to any other unit at the facility.

(e) Closure by removal. Owners or operators of surface impoundments, land treatment units, and waste piles closing by removal or decontamination under 401 KAR Chapter 35 standards shall obtain a postclosure permit unless they can demonstrate to the Cabinet that the closure met the standards for closure by removal or decontamination in Section 6 of 401 KAR 34:200, Section 8(5) of 401 KAR 34:220, or Section 8 of 401 KAR 34:210, respectively. The demonstration may be made in the following ways:

1. If the owner or operator has submitted a Part B application for a postclosure permit, the owner or operator may request a determination based on information contained in the application that 401 KAR Chapter 34 closure by removal standards were met. If the Cabinet believes that 401 KAR Chapter 34 standards were met, it shall notify the public of this proposed decision, allow for public comment, and reach a final determination according to the procedures in paragraph (f) of this subsection.

2. If the owner or operator has not submitted a Part B application for a postclosure permit, the owner or operator may petition the Cabinet for a determination that a postclosure permit is not required because the closure met the applicable 401 KAR Chapter 34 closure standards.

a. The petition shall include data demonstrating that closure by removal or decontamination standards were met, or it shall demonstrate that the unit closed under requirements that met or exceeded the applicable 401 KAR Chapter 34 closure-by-removal standard.

b. The Cabinet shall approve or deny the petition according to the procedures outlined in paragraph (f) of this subsection.

(f) Procedures for closure equivalency determination.

1. If a facility owner or operator seeks an equivalency demonstration under paragraph (e) of this subsection, the Cabinet shall provide the public, through a newspaper notice, the opportunity to submit written comments on the information submitted by the owner or operator within thirty (30) days from the date of the notice. The Cabinet shall also, in response to a request or at its own discretion, hold a public hearing whenever such a hearing might clarify one (1) or more issues concerning the equivalence of the 401 KAR Chapter 35 closure to a 401 KAR Chapter 34 closure. The Cabinet shall give public notice of the hearing at least thirty (30) days before it occurs. (Public notice of the hearing may be given at the same time as notice of the opportunity for the public to submit written comments, and the two (2) notices may be combined.)

2. The Cabinet shall determine whether the 401 KAR Chapter 35 closure met 401 KAR Chapter 34 closure by removal or decontamination requirements within ninety (90) days of its receipt of the petition. If the Cabinet finds that the closure did not meet the applicable 401 KAR Chapter 34 standards, it shall provide the owner or operator with a written statement of the reasons why the closure failed to meet 401 KAR Chapter 34 standards. The owner or operator may submit additional information in support of an equivalency demonstration within thirty (30) days after

receiving such written statement. The Cabinet shall review any additional information submitted and make a final determination within sixty (60) days.

3. If the Cabinet determines that the facility did not close in accordance with 401 KAR Chapter 34 closure by removal standards, the facility is subject to postclosure permitting requirements.

**Section 2. Considerations of Federal Law.** Permits shall be issued in a manner and shall contain conditions consistent with requirements of applicable federal laws. These laws may include:

(1) 16 USC 1273-1287 (The Wild and Scenic Rivers Act), Section 7 of the Act prohibits the assisting by license or otherwise the construction of any water resources project that would have a direct, adverse effect on the values for which a national wild and scenic river was established.

(2) 16 USC 470 (The National Historic Preservation Act of 1966, as amended), Section 106 of the Act and implementing regulations (36 CFR Part 800) require the adoption measures before issuing a license, when feasible to mitigate potential adverse effects of the licensed activity and properties listed or eligible for listing in the National Register of Historic Places. The Act's requirements are to be implemented in cooperation with State Historic Preservation Officers and upon notice to, and when appropriate, in consultation with the Advisory Council on Historic Preservation.

(3) 16 USC 1531 (The Endangered Species Act, as amended), Section 7 of the Act and implementing regulations (50 CFR Part 402) require that in consultation with the Secretary of the Interior or Commerce, any action authorized is not likely to jeopardize the continued existence of any endangered or threatened species or adversely affect its critical habitat.

(4) 16 USC 661 et seq., (The Fish and Wildlife Coordination Act of 1958, as amended) requires that, before issuing a permit proposing or authorizing the impoundment (with certain exemptions), diversion or other control or modification of any body of water, the permitting agency shall consult with the appropriate state agency exercising jurisdiction over wildlife resources to conserve those resources.

**Section 3. Effect of a Permit.**

(1) Compliance with a hazardous waste permit during its term constitutes compliance with KRS Chapter 224 for purposes of enforcement except for those requirements not included in the permit which:

(a) Become effective by statute;

(b) Are promulgated under 401 KAR Chapter 37 restricting the placement of hazardous wastes in or on the land;

(c) Are promulgated under 401 KAR Chapter 34 regarding leak detection systems for new and replacement surface impoundment, waste pile, and landfill units, and lateral expansions of surface impoundment, waste pile, and landfill units. The leak detection system requirements include double liners, COA programs, monitoring, action leakage rates and response action plans, and shall be implemented through the procedures of this chapter. However, a permit may be modified, revoked and reissued, or terminated during its term for cause as set forth in 401 KAR 38:040 and in 401 KAR

Chapter 40, or the permit may be modified upon the request of the permittee as set forth in 401 KAR 38:040; or.

(d) Are promulgated under 401 KAR 35:275, 35:280, or 35:281.

(2) The issuance of a permit does not convey any property rights of any sort, or any exclusive privilege.

(3) The issuance of a permit does not authorize any injury to persons or property or invasion of other private rights, or any infringement of state or local laws or administrative regulations.

#### **Section 4. Prohibition of Use of Unpermitted Facility.**

(1) Restrictions. No person shall deliver hazardous waste to a facility for treatment, storage, or disposal unless the owner or operator has:

(a) Registered with the Cabinet as an existing hazardous waste facility in operation on or before November 19, 1980; or

(b) Qualified for interim status in accordance with Section 1(1) of 401 KAR 38:020; or

(c) Been granted a hazardous waste site or facility permit by the Cabinet.

(2) Permit required. No person shall engage in the storage, treatment, or disposal of hazardous waste without first obtaining construction or operation permits from the Cabinet as specified in KRS 224.46-520(1).

(3) Issuance of a federal permit to own or operate a hazardous waste site or facility shall not relieve the owner or operator of the responsibility to comply with the requirements of this chapter.

Effective Date - March 12, 1997

**401 KAR 38:020. Interim Status Provisions.**

**RELATES TO:** KRS 224.01, 224.10, 224.40, 224.43, 224.46, 224.99, 40 CFR 270 Subpart G

**STATUTORY AUTHORITY:** KRS 224.10-100, 224.46-520

**NECESSITY AND FUNCTION:** To implement provisions of KRS 224.46-520 and to establish permitting standards for interim status facilities.

**Section 1. Qualifying for Interim Status.**

(1) Any person who owns or operates an "existing hazardous waste management facility" or a hazardous waste site or facility in existence on the effective date of statutory or regulatory amendments under RCRA that render the facility subject to the requirements to have a RCRA permit shall have interim status and shall be treated as having been issued a permit to the extent he has:

(a) Complied with the requirements of KRS 224.46-520 pertaining to notification of an existing hazardous waste activity; and

(b) Complied with the requirements of 401 KAR 38:070 governing submission of Part A applications.

(2) When the Cabinet determines on examination or reexamination of a Part A application (or its equivalent, Registration of Intent to Apply for a Permit) that it fails to meet the standards of these administrative regulations, it may notify the owner or operator that the application is deficient and that the owner or operator is therefore not entitled to interim status. The owner or operator shall then be subject to enforcement procedures for operating without a permit.

(3) Subsection (1) of this section shall not apply to any facility which has been previously denied a permit or if authority to operate the facility under 401 KAR Chapters 30 to 39 and KRS Chapter 224 has been previously terminated.

**Section 2. Operation During Interim Status.**

(1) During the interim status period the facility, except as provided in Section 3 of this administrative regulation, shall not:

(a) Treat, store or dispose of hazardous waste not specified in Part A of the permit application (or its equivalent, Registration of Intent to Apply for a Permit);

(b) Employ processes not specified in Part A of the permit application (or its equivalent, Registration of Intent to Apply for a Permit); or

(c) Exceed the design capacities specified in Part A of the permit application (or its equivalent, Registration of Intent to Apply for a Permit).

(2) During interim status, owners or operators shall comply with the interim status standards in 401 KAR Chapter 35.



### **Section 3. Changes During Interim Status.**

(1) Except as provided in subsection (2) of this section, the owner or operator of an interim status facility may make the following changes at the facility:

(a) Treatment, storage, or disposal of new hazardous wastes not previously identified in Part A of the permit application (and, in the case of newly listed or identified wastes, addition of the units being used to treat, store, or dispose of the hazardous wastes on the effective date of the listing or identification) if the owner or operator submits a revised Part A permit application prior to the treatment, storage, or disposal;

(b) Increases in the design capacity of processes used at the facility if the owner or operator submits a revised Part A permit application prior to a change (along with a justification explaining the need for the change) and the Cabinet approves the changes because:

1. There is a lack of available treatment, storage, or disposal capacity at other hazardous waste management facilities; or

2. The change is necessary to comply with a federal, state, or local requirement.

(c) Changes in the processes for the treatment, storage, or disposal of hazardous waste or addition of processes if the owner or operator submits a revised Part A permit application prior to such change (along with a justification explaining the need for the change) and the Cabinet approves the change because:

1. The change is necessary to prevent a threat to human health and the environment because of an emergency situation; or

2. The change is necessary to comply with a federal, state, or local requirement.

(d) Changes in the ownership or operational control of a facility if the new owner or operator submits a revised Part A permit application no later than ninety (90) days prior to the scheduled change. When a transfer of operational control of a facility occurs, the old owner or operator shall comply with the requirements of 401 KAR 35:080 to 35:130 until the new owner or operator has demonstrated to the Cabinet that he is complying with the requirements of that chapter. The new owner or operator shall demonstrate compliance with 401 KAR 35:080 to 35:130 requirements within six (6) months of the date of the change in ownership or operational control of the facility. Upon demonstration to the Cabinet by the new owner or operator of compliance with 401 KAR 35:080 to 35:130, the Cabinet shall notify the old owner or operator in writing that he no longer needs to comply with 401 KAR 35:080 through 35:130 as of the date of demonstration. All other interim status duties are transferred effective immediately upon the date of the change in ownership or operational control of the facility.

(e) Changes made in accordance with an interim status corrective action order issued by EPA under section 3008(h) of RCRA or other federal authority, by the Cabinet, or by a court in a judicial action brought by EPA or by the Cabinet. Changes under this subsection are limited to the treatment, storage, or disposal of solid waste from releases that originate within the boundary of the facility.

(f) Addition of newly regulated units for the treatment, storage, or disposal of hazardous waste if the owner or operator submits a revised Part A permit application on or before the date on which the unit becomes subject to the new requirements.

(2) Except as specifically allowed under this subsection, changes listed under subsection (1) of this section may not be made if they amount to reconstruction of the hazardous

waste management facility. Reconstruction occurs when the capital investment in the changes to the facility exceeds fifty (50) percent of the capital cost of a comparable entirely new hazardous waste management facility. If all other requirements are met, the following changes may be made even if they amount to a reconstruction:

(a) Changes made solely for the purposes of complying with the requirements of Section 4 of 401 KAR 35:190 for tanks and ancillary equipment.

(b) If necessary to comply with federal, state, or local requirements, changes to an existing unit, changes solely involving tanks or containers, or addition of the replacement surface impoundments that satisfy the standards of Section 3004(o) of RCRA.

(c) Changes that are necessary to allow owners or operators to continue handling newly listed or identified hazardous wastes that have been treated, stored, or disposed of at the facility prior to the effective date of this administrative regulation establishing the new listing or identification.

(d) Changes during closure of a facility or of a unit within a facility made in accordance with an approved closure plan.

(e) Changes necessary to comply with an interim status corrective action order issued by EPA under section 3008(h) of RCRA or other federal authority, by the Cabinet, or by a court in a judicial proceeding brought by EPA or the Cabinet, provided that the changes are limited to the treatment, storage, or disposal of solid waste from releases that originate within the boundary of the facility.

(f) Changes to treat or store, in tanks, containers, drip pads, or containment buildings, hazardous wastes subject to land disposal restrictions imposed by 401 KAR Chapter 37 or KRS Chapter 224, provided that the changes are made solely for the purpose of complying with 401 KAR Chapter 37 or KRS Chapter 224.

(g) Addition of newly regulated units under subsection (1)(f) of this section.

**Section 4. Termination of Interim Status.** Interim status terminates when:

(1) Final administrative disposition of a permit application is made; or

(2) Interim status is terminated as provided in Section 4 of 401 KAR 38:040.

(3) For owners or operators of each land disposal facility which has been granted interim status prior to November 8, 1984, on November 8, 1985, unless:

(a) The owner or operator submits a Part B application for a permit for the facility prior to that date; and

(b) The owner or operator certifies that the facility is in compliance with all applicable ground water monitoring and financial responsibility requirements.

(4) For owners or operators of each land disposal facility which is in existence on November 8, 1984 or the date applicable amendments are made to 401 KAR Chapters 30 to 39 which render the facility subject to the requirements in 401 KAR Chapters 30 to 39 and which is granted interim status, twelve (12) months after the date on which the facility first becomes subject to the permit requirement unless the owner or operator of the facility:

(a) Submits a Part B application for a permit for the facility before the date twelve (12) months after the date on which the facility first becomes subject to the permit requirements; and

(b) Certifies that the facility is in compliance with all applicable ground water monitoring and financial responsibility requirements.

(5) For owners or operators of any land disposal unit that is granted authority to operate under Section 3(1)(a), (b), and (c) of this administrative regulation, on the date twelve (12) months after the effective date of the requirement, unless the owner or operator certifies that the unit is in compliance with all applicable groundwater monitoring and financial responsibility requirements.

(6) For owners or operators of each incinerator facility which has achieved interim status prior to November 8, 1989, interim status terminates on November 8, 1989, unless the owner or operator of the facility submits a Part B application for a permit for an incinerator facility by November 8, 1986.

(7) For owners or operators of any facility (other than a land disposal or an incinerator facility) which has achieved interim status prior to November 8, 1984, interim status terminates on November 8, 1992, unless the owner or operator of the facility submits a Part B application for a permit for the facility by November 8, 1988.

**Section 5. Deadlines for Submission of Part B of the Application.** All hazardous waste sites or facilities which have submitted Part A of the application or its equivalent shall be required to submit Part B of the application within six (6) months of the Cabinet's decision to require the submittal, according to Section 2(4) of 401 KAR 38:070. The Cabinet may base its decision to require Part B of the application upon receiving Phase II or final authorization from the EPA. However, in accordance with KRS 224.46-520(1), the Cabinet may require submission of Part B of the application at any time.

Effective Date - April 28, 1993

**401 KAR 38:025. Permit Review and Determination Timetables.**

**RELATES TO:** KRS 224.01, 224.10, 224.40, 224.50

**STATUTORY AUTHORITY:** KRS 224.10-220

**NECESSITY AND FUNCTION:** KRS Chapter 224 requires the Cabinet to adopt regulations for the management, processing, and disposal of wastes. KRS 224.40-305 requires persons who establish, construct, operate, maintain or permit the use of a waste site or facility to obtain a permit. This chapter establishes the permitting standards for hazardous waste sites or facilities. KRS 224.10-220 requires the Cabinet to establish timetables for the review and determination of permit applications. This regulation sets forth timetables for the review and determination of hazardous waste permit applications.

**Section 1. Submittal of Permit Applications and Registrations.**

(1) The official date of receipt for documents associated with a hazardous waste permit shall be the date the document is stamped received by the Division of Waste Management.

(2) The applicant for a hazardous waste permit shall have the burden of establishing that the application is in compliance with all requirements of KRS Chapter 224 and 401 KAR Chapters 30 to 39.

**Section 2. Timetables for Hazardous Waste Permit Review and Determination.**

(1) If a Part A application is required under KRS Chapter 224 and 401 KAR Chapters 30 to 39, the applicant shall submit that application at least forty-five (45) days prior to submitting any of the applications set forth in subsection (2) of this section.

(2) All hazardous waste permit applications shall be reviewed and a determination made to issue or deny the permit within the following timetables:

(a) Part B Applications for New Hazardous Waste Permits for Storage in Containers or Tanks only: 180 calendar days.

(b) Part B Applications for New Hazardous Waste Permits for Storage and Treatment in Containers or Tanks: 365 calendar days.

(c) Part B Applications for New Hazardous Waste Incinerators: 365 calendar days.

(d) Part B Applications for Facilities with Land-based Units (Surface Impoundments, Waste Piles, Land Treatment Units, Landfills) and other Miscellaneous Units: 365 calendar days.

(e) Application Review for Major Modifications to a Hazardous Waste Permit: 365 calendar days.

(f) Minor Modifications to a Hazardous Waste Permit requiring approval: ninety (90) calendar days.

(g) Closure Plan with Groundwater Monitoring: 365 calendar days.

(h) Closure Plan without Groundwater Monitoring: 180 calendar days.

(i) Facilities that gain interim status through federal regulations published after the effective date of this regulation shall negotiate a schedule based on the procedures necessary to secure a complete review of the permit application.

(j) Applications for renewals shall be reviewed and a determination made to issue or deny the permit within the timetables identified in paragraphs (a) to (d) of this subsection for that type of facility.

(3) The timetables specified in subsections (1) and (2) of this section may be extended at the initiative of either the Cabinet or the applicant. The purpose and period of the extension shall be in writing and, if agreed to, shall be signed by both the Cabinet and the applicant. The agreement to extend the timetable shall become part of the Cabinet's permit file.

(4) If a hazardous waste permit application requires more than one (1) type of permit action as set forth in subsection (2) of this section, then the review time for each permit action shall apply and run consecutively when computing the total review time for the issuance or denial of the permit.

**Section 3. Timetable Exclusions.** The time periods specified in Section 2 of this regulation shall not run during the following intervals:

(1) From the date the Cabinet mails or hand delivers a notice of deficiency to an applicant until the date the Division of Waste Management stamps as received a complete response to the deficiencies. If a notice of deficiency is sent to an applicant, the applicant shall have forty-five (45) calendar days to respond to the notice of deficiency. The forty-five (45) day time period may be extended by agreement between the Cabinet and the applicant. Failure to respond to a notice of deficiency within the specified time shall be grounds for denial of the permit;

(2) Sixty (60) days from the date of any public hearing or meeting on the application to allow the Cabinet time to consider public comments;

(3) From the date the Cabinet submits an application to U.S. EPA for overview until the date the Cabinet receives EPA's comments;

(4) From the date a permit application is subject to any adjudicatory process that prevents the Cabinet from making a determination to the date all administrative or judicial hearings are final and all parties are in compliance with all final orders resulting from those hearings; and

(5) If a governing body holds a public hearing pursuant to KRS 224.40-310(7), sixty (60) days from the date of publication of the public notice on the hearing.

**Section 4. Timetable Extensions.** If two (2) or more permits for a facility, site, source, construction project, or other entity are required from the Cabinet, the Cabinet may coordinate the issuance of the permits, establishing different review and action times that shall be accomplished by the Cabinet or applicant. If the permits are coordinated, the Cabinet shall so notify the applicant and indicate the time frames under which the intermediate actions and final permit actions shall be accomplished. The established time frame for final action shall not exceed the last date for action that is provided for under applicable statutes and regulations, based on all applications being considered and their filing dates.

**Section 5. Applicability Dates.**

(1) The provisions of this regulation shall apply to applications received after the effective date of this regulation.

(2)(a) The provisions of this regulation shall not apply to applications pending on the effective date of this regulation unless, within ninety (90) days of the effective date of this regulation, the applicant submits written notification to the Cabinet that the applicant desires to have the application subject to this regulation.

(b) If the applicant fails to notify the Cabinet in accordance with paragraph (a) of this subsection, the application shall not be subject to the provisions of this regulation.

(c) Applications for which the Cabinet receives written notice in accordance with the provisions of paragraph (a) of this subsection shall be subject to all provisions of this regulation beginning on the date the Cabinet receives the notice provided for in paragraph (a) of this subsection.

**Effective Date - March 12, 1997**

**401 KAR 38:030. Conditions Applicable to All Permits.**

**RELATES TO:** KRS 224.10, 224.40, 224.46, 224.99

**STATUTORY AUTHORITY:** KRS 224.10-100, 224.46-520

**NECESSITY AND FUNCTION:** KRS 224.40-305 and 224.46-520 require any person who treats, stores, recycles or disposes of hazardous waste to first obtain a hazardous waste site or facility permit from the Cabinet. This chapter establishes the permitting process for hazardous waste sites or facilities. An overview of the permit program is found in the Necessity and Function of 401 KAR 38:010. This administrative regulation establishes the conditions applicable to all permits.

**Section 1. Conditions Applicable to All Permits.** All conditions applicable to all permits shall be incorporated into the permits either expressly or by reference. If incorporated by reference, a specific citation to these regulations must be given in the permit.

(1) **Duty to comply.** The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the appropriate Kentucky Revised Statute and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. However, the permittee need not comply with the conditions of this permit to the extent and for the duration such noncompliance is authorized in an emergency permit (see Section 4 of 401 KAR 38:010).

(2) **Duty to reapply.** If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit.

(3) **Duty to halt or reduce activity.** It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

(4) **Duty to mitigate.** In the event of noncompliance with the permit, the permittee shall take all reasonable steps to minimize releases to the environment, and shall carry out such measures as are reasonable to prevent significant adverse impacts on human health and the environment.

(5) **Proper operation and maintenance.** The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the permit.

(6) **Permit actions.** This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a modification of planned changes or anticipated noncompliance, does not stay any permit condition.

(7) Property rights. This permit does not convey any property rights of any sort, or any exclusive privilege.

(8) Duty to provide information. The permittee shall furnish the Cabinet, within a reasonable time, any information which the Cabinet may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Cabinet upon request copies of records required to be kept by this permit.

(9) Inspection and entry. The permittee shall allow the Cabinet or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:

(a) Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;

(b) Have access to and copy at reasonable times any records that must be kept under the conditions of this permit;

(c) Inspect at reasonable times any facility's equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

(d) Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the appropriate Kentucky Revised Statutes, any substances or parameters at any location.

(10) Monitoring and records.

(a) Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

(b) The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, the certification required by Section 4(2)(i) of 401 KAR 34:050, and records of all data used to complete the application for this permit, for a period of at least three (3) years from the date of the sample, measurement, report, certification or application. This period may be extended by request of the Cabinet at any time. In addition, the permittee shall maintain records from all groundwater monitoring wells and associated groundwater surface elevations, for the active life of the facility, and for disposal facilities for the postclosure care period as well.

(c) Records of monitoring information shall include:

1. The date, exact place, and time of sampling or measurements;
2. The individual(s) who performed the sampling or measurements;
3. The date(s) analyses were performed;
4. The individual(s) who performed the analyses;
5. The analytical techniques or methods used; and
6. The results of such analyses.

(11) Signatory requirement. All applications, reports, or information submitted to the Cabinet shall be signed and certified (see Section 7 of 401 KAR 38:070).

(12) Reporting requirements.

(a) Planned changes. The permittee shall give notice to the Cabinet as soon as possible of any planned physical alterations or additions to the permitted facility.



(b) Anticipated noncompliance. The permittee shall give advance notice to the Cabinet of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements. In addition, for a new hazardous waste site or facility, the permittee may not commence treatment, storage, or disposal of hazardous waste; and for a facility being modified the permittee may not treat, store, or dispose of hazardous waste in the modified portion of the facility until:

1. The permittee has submitted to the Cabinet, by certified mail or hand delivery, a letter signed by the permittee and a professional engineer registered in Kentucky stating that the facility has been constructed or modified in compliance with the permit; and

2.a. The Cabinet has inspected the modified or newly constructed facility and finds it is in compliance with the conditions of the permit; or

b. Within fifteen (15) days of the date of submission of the letter in subparagraph 1 of this paragraph, the permittee has not received notice from the Cabinet of its intent to inspect, prior inspection is waived and the permittee may commence treatment, storage, or disposal of hazardous waste.

(c) Transfers. This permit is not transferable to any person except after notice to the Cabinet. The Cabinet may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the appropriate statute (see Section 1 of 401 KAR 38:040, in some cases, modification or revocation and reissuance is mandatory).

(d) Monitoring reports. Monitoring results shall be reported at the intervals specified in this permit.

(e) Compliance schedules. Reports of compliance or noncompliance with or any progress reports on interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than fourteen (14) days following each scheduled date.

(f) Immediate reporting. The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within two (2) hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within five (5) days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. The following shall be included as information which must be reported orally within two (2) hours:

1. Information concerning release of any hazardous waste that may cause an endangerment to public drinking water supplies, including both surface water and groundwater used for public drinking water supply.

2. Any information of a release or discharge of hazardous waste, or of a fire or explosion from a hazardous waste site or facility, which could threaten the environment or human health outside the facility. The description of the occurrence and its cause shall include:

- a. Name, address, and telephone number of the owner or operator;
- b. Name, address, and telephone number of the facility;
- c. Date, time and type of incident;

- d. Name and quantity of material(s) involved;
- e. The extent of injuries, if any;
- f. An assessment of actual or potential hazards to the environment and human health outside the facility, where this is applicable; and
- g. Estimated quantity and disposition of recovered material that resulted from the incident. The Cabinet may waive the five (5) day written notice requirement in favor of a written report within fifteen (15) days.

(g) Other noncompliance. The permittee shall report all instances of noncompliance not reported under paragraphs (a), (d), (e) and (f) of this subsection at the time monitoring reports are submitted. The reports shall contain the information listed in paragraph (f) of this subsection.

(h) The following reports required by 401 KAR Chapter 34 shall be submitted:

1. Manifest discrepancy report. If a significant discrepancy in a manifest is discovered, the permittee must attempt to reconcile the discrepancy. If not resolved within fifteen (15) days, the permittee must submit a letter or report including a copy of the manifest to the Cabinet (see Section 3 of 401 KAR 34:050).

2. Unmanifested waste report. Must be submitted to the Cabinet within fifteen (15) days of receipt of unmanifested waste (see Section 7 of 401 KAR 34:050).

3. Annual report. An annual report must be submitted covering facility activities during the previous calendar year (see Section 6 of 401 KAR 34:050).

4. Waste minimization report. Must be submitted to the Cabinet annually stating that the generator of the hazardous waste has a program in place to reduce the volume or quantity and toxicity of such waste to the degree determined by the generator to be economically practicable. The proposed method of treatment, storage, or disposal is that practicable method currently available to the generator which minimizes the present and future threat to human health and the environment.

(i) Other information. Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Cabinet, he shall promptly submit such facts or information.

(j) All permits issued by the Cabinet will be subject to any future statutory or regulatory changes whose purpose is the protection of the health and welfare of the citizens of the Commonwealth or their environment.

(13) Information repository. The Cabinet may require the permittee to establish and maintain an information repository at any time, based on the factors set forth in Section 16(2) of 401 KAR 38:050. The information repository will be governed by the provisions of Section 16 (3) through (6) of 401 KAR 38:050.

**Section 2. Requirements for Recordkeeping and Reporting of Monitoring Results.**  
All permits shall specify:

(1) Requirements concerning the proper use, maintenance, and installation, when appropriate, of monitoring equipment or methods (including biological monitoring methods when appropriate);

(2) Required monitoring including type, intervals, and frequency sufficient to yield data which are representative of the monitored activity including, when appropriate, continuous monitoring;

(3) Applicable reporting requirements based upon the impact of the regulated activity and as specified in KRS Chapter 224 and the Kentucky Hazardous Waste Management Regulations. Reporting shall be no less frequent than specified in the above regulations.

### **Section 3. Establishing Permit Conditions.**

(1) In addition to conditions required for all permits in Section 1 of this administrative regulation, the Cabinet shall establish conditions on a case-by-case basis in permits under Section 5 of 401 KAR 38:040 (duration of permit), Section 4 of this administrative regulation, (schedule of compliance), Section 2 of this administrative regulation (monitoring), and for Cabinet issued permits only Section 4(2) of this administrative regulation (alternate schedules of compliance) and Section 3 of 401 KAR 38:010 (effect of a permit). In addition, each hazardous waste site or facility permit shall include permit conditions necessary to achieve compliance with each of the applicable requirements specified in the Kentucky Hazardous Waste Management Regulations. In satisfying this provision, the Cabinet may incorporate applicable requirements of the Kentucky Hazardous Waste Management Regulations directly into the permit or establish other permit conditions that are based on these regulations.

(2) Individual programs.

(a) Each hazardous waste site or facility permit shall include permit conditions necessary to achieve compliance with KRS Chapter 224 and regulations, including each of the applicable requirements specified in 401 KAR Chapters 34, 36 and 37. In satisfying this provision, the secretary may incorporate applicable requirements of 401 KAR Chapters 34, 36 and 37 directly into the permit or establish other permit conditions that are based on these requirements.

(b) Each permit issued under KRS 224.40-310 and 224.46-520 shall contain terms and conditions as the Cabinet determines necessary to protect human health and the environment.

### **Section 4. General.**

(1) The permit may, when appropriate, specify a schedule of compliance leading to compliance with the appropriate statute and regulations.

(a) Time for compliance. Any schedules of compliance under this administrative regulation shall require compliance as soon as possible.

(b) Interim dates. Except as provided in subsection (2)(a)2 of this section, if a permit establishes a schedule of compliance which exceeds one (1) year from the date of permit issuance, the schedule shall set forth interim requirements and the dates for their achievement.

1. The time between interim dates shall not exceed one (1) year.

2. If the time necessary for completion of any interim requirement (such as the construction of a control facility) is more than one (1) year and is not readily divisible into stages for completion, the permit shall specify interim dates for the submission of reports of progress toward completion of the interim requirements and indicate a projected completion date.

(c) Reporting. The permit shall be written to require that no later than fourteen (14) days following each interim date and the final date of compliance, the permittee shall notify the Cabinet in writing of its compliance or noncompliance with the interim or final requirements.

(2) Alternative schedules of compliance. A permit applicant or permittee may cease conducting regulated activities (by receiving a terminal volume of hazardous waste at a hazardous

waste site or facility; and for treatment and storage hazardous waste sites or facilities, closing pursuant to the applicable requirements, and, for disposal hazardous waste sites or facilities, closing and conducting postclosure care pursuant to the applicable requirements), rather than continue to operate and meet permit requirements as follows:

(a) If the permittee decides to cease conducting regulated activities at a given time within the term of a permit which has already been issued:

1. The permit may be modified to contain a new or additional schedule leading to timely cessation of activities; or

2. The permittee shall cease conducting permitted activities before noncompliance with any interim or final compliance schedule requirement already specified in the permit.

(b) If the decision to cease conducting regulated activities is made before issuance of a permit whose term will include the termination date, the permit shall contain a schedule leading to termination which will ensure timely compliance with applicable requirements.

(c) If the permittee is undecided whether to cease conducting regulated activities, the Cabinet may issue or modify a permit to contain two (2) schedules as follows:

1. Both schedules shall contain an identical interim deadline requiring a final decision on whether to cease conducting regulated activities no later than a date which ensures sufficient time to comply with applicable requirements in a timely manner if the permittee's decision is to continue conducting regulated activities;

2. One (1) schedule shall lead to timely compliance with applicable requirements;

3. The second schedule shall lead to cessation of regulated activities by a date which will ensure timely compliance with applicable requirements;

4. Each permit containing two (2) schedules shall include a requirement that after the permittee has made a final decision under paragraph (a) of this subsection he shall follow the schedule leading to compliance if the decision is to continue conducting regulated activities, and follow the schedule leading to termination if the decision is to cease conducting regulated activities.

(d) The applicant's or permittee's decision to cease conducting regulated activities shall be evidenced by a firm public commitment satisfactory to the Cabinet, such as a resolution of the board of directors of a corporation.

**Effective Date - March 12, 1997**

**401 KAR 38:040. Changes to Permits; Expiration of Permits.**

**RELATES TO:** KRS 224.01, 224.10, 224.40, 224.43, 224.46, 224.99, 40 C.F.R 270 Subparts D, E

**STATUTORY AUTHORITY:** KRS 224.10-100, 224.46-520, 224.46-530

**NECESSITY, FUNCTION, AND CONFORMITY:** To implement provisions of KRS 224.46-520 and 224.46-530 relative to changes and expiration of hazardous waste permits. This administrative regulation is equivalent to federal standards established in 40 CFR 270 Subparts D and E except for: Section 1(2), which adds a reference to applicable statutory requirements contained in KRS 224.40-330; Section 4(1)(d), which is added to allow the Cabinet to revoke a permit upon violation of KRS Chapter 224 and applicable state regulations; Section 5(5), which is added to address nerve and blister agents as identified by KRS 224.50-130; and Section 6(1)(a), which clarifies fee requirements for continuance of an expired permit. In Sections 2 and 3 of this administrative regulation, Kentucky has chosen to adopt previous federal permit modification procedures, rather than current federal procedures. U.S. EPA has approved states to use either method. Use of this previous permit modification procedure provides consistency with other Kentucky environmental programs.

**Section 1. Transfer of Permits.**

(1) A permit may be transferred by the permittee to a new owner or operator only if the permit has been modified or revoked and reissued (under subsection (2) of this section or Section 2(2)(b) of this administrative regulation) to identify the new permittee and incorporate such other requirements as may be necessary under KRS Chapter 224 and the waste management administrative regulations.

(2) Changes in ownership or operational control of a facility may be made as a major modification with prior written approval of the Cabinet in accordance with Section 2 of this administrative regulation. The new owner or operator shall submit a revised permit application no later than ninety (90) days prior to the scheduled change. Among other demonstrations, this application shall comply with KRS 224.40-330. A written agreement containing a specific date for transfer of permit responsibility between the current and new permittees shall also be submitted to the Cabinet. When a transfer of ownership or operational control occurs, the old owner or operator shall comply with the requirements of 401 KAR Chapter 34 until the Cabinet approves transfer to the new owner or operator. The new owner or operator shall demonstrate compliance with Section 2 of this administrative regulation and 401 KAR Chapter 34 within six (6) months of the date of the change of ownership or operational control of the facility. Upon demonstration to the Cabinet by the new owner or operator of compliance with 401 KAR Chapter 34, the Cabinet shall notify the old owner or operator that he no longer needs to comply with 401 KAR Chapter 34 as of the date of demonstration.

**Section 2. Major Modification or Revocation and Reissuance of Permits.** When the Cabinet receives any information (for example, if the Cabinet inspects the facility, receives information submitted by the permittee as required in the permit under Section 1 of 401 KAR 38:030, receives a request for modification or revocation and reissuance under Section 2 of 401 KAR 38:050, or conducts a review of permit file), the Cabinet may determine whether one (1) or more of the causes listed in subsections (1) and (2) of this section for modification or revocation and reissuance or both exist. If cause exists, the Cabinet may modify or revoke and reissue the permit accordingly, subject to the limitations of subsection (3) of this section and may request an updated application if necessary. When a permit is modified, only the conditions subject to modification are reopened. If a permit is revoked and reissued, the entire permit is reopened and subject to revision and the permit is reissued for a new term (see Section 2(4) of 401 KAR 38:050). If cause does not exist under this section or Section 3 of this administrative regulation, the Cabinet shall not modify or revoke and reissue the permit. If a permit modification satisfies the criteria in Section 3 of this administrative regulation for "minor modifications," the permit may be modified without a draft permit or public review. Otherwise, a draft permit shall be prepared and other procedures in 401 KAR 38:050 and, if applicable, 401 KAR 38:500 followed.

(1) Causes for modification. Paragraphs (a) to (d) of this subsection are causes for modification but not revocation and reissuance of permits. Paragraphs (a) to (d) of this subsection may be causes for revocation and reissuance as well as modification, when the permittee requests or agrees.

(a) Alterations. There are material and substantial alterations or additions to the permitted hazardous waste site or facility or activity which occurred after permit issuance which justify the application of permit conditions that are different or absent in the existing permit.

(b) Information. The Cabinet has received new information. Permits may be modified during their terms for this cause only if the information was not available at the time of permit issuance (other than revised administrative regulations, guidance, or test methods) and would have justified the application of different permit conditions at the time of issuance.

(c) New statutory requirements or administrative regulations. The standards or administrative regulations on which the permit was based have been changed by statute, through promulgation of new or amended standards or administrative regulations, or by judicial decision after the permit was issued. Except as provided in paragraph (e) of this subsection, permits may be modified during their terms for this cause as follows:

1. The Cabinet may modify the permit when the standards or administrative regulations on which the permit was based have been changed by statute or amended standards or administrative regulations.

2. Permittee may request modification when:

a. The permit condition to be modified was based on a promulgated administrative regulation in 401 KAR Chapters 30 to 38; and

b. The Cabinet has revised, withdrawn, or modified that portion of the administrative regulation on which the permit condition was based; or

c. A permittee requests modification in accordance with Section 2 of 401 KAR 38:050 within ninety (90) days after notice of the action on which the request is based.

3. For judicial decisions, a court of competent jurisdiction has remanded and stayed Cabinet promulgated administrative regulations, if the remand and stay concern that portion of the administrative regulations on which the permit condition was based or if a request is filed by the permittee in accordance with Section 2 of 401 KAR 38:050 within ninety (90) days of judicial remand.

(d) Compliance schedules. The Cabinet determines good cause exists for modification of a compliance schedule, such as an act of God, strike, flood, materials shortage, or other events over which the permittee has little or no control and for which there is no reasonably available remedy (see also Section 3 of this administrative regulation on minor modifications).

(e) The Cabinet may modify a permit:

1. When modification of a closure plan is required under Section 3(2) or 4(2) of 401 KAR 34:070.

2. When the Cabinet receives notification of expected closure under Section 4 of 401 KAR 34:070 and finds that any of the following previously granted permit conditions are no longer warranted:

a. Extension of the ninety (90) or 180 day periods under Section 4 of 401 KAR 34:070;  
b. Modification of an extended postclosure care period under Section 7 of 401 KAR 34:070;

c. Continuation of security requirements under Section 7(2) of 401 KAR 34:070; or  
d. Permission to disturb the integrity of the containment system under Section 7(3) of 401 KAR 34:070.

3. When the permittee has filed a request under Section 4 of 401 KAR 34:120 for a variance to the level of financial responsibility or when the Cabinet demonstrates under Section 5 of 401 KAR 34:120 that an upward adjustment of the level of financial responsibility is required.

4. When the corrective action program specified in the permit under Section 11 of 401 KAR 34:060 has not brought the regulated unit into compliance with the groundwater protection standard within a reasonable period of time.

5. To include a detection monitoring program meeting the requirements of Section 9 of 401 KAR 34:060, when the owner or operator has been conducting a compliance monitoring program under Section 10 of 401 KAR 34:060 or a corrective action program under Section 11 of 401 KAR 34:060 and the compliance period ends before the end of the postclosure care period for the unit.

6. When a permit requires a compliance monitoring program under Section 10 of 401 KAR 34:060, but monitoring data collected prior to permit issuance indicate that the facility is exceeding the groundwater protection standard.

7. To include the conditions applicable to units at a facility that were not previously included in the site or facility's permit.

8. When a land treatment unit is not achieving complete treatment of hazardous constituents under its current permit conditions.

9. To include conditions applicable in new or amended standards or administrative regulations.

10. When modification is necessary to protect the public health or the environment.

11. To include conditions applicable as the result of a hearing or enforcement action as specified in 401 KAR Chapter 40.

(f) Notwithstanding any other provision in this section, when a permit for a land disposal facility is reviewed by the Cabinet under Section 5(4) of this administrative regulation, the Cabinet shall modify the permit as necessary to assure that the facility continues to comply with the currently applicable requirements in 401 KAR Chapters 30 to 39.

(2) Causes for modification or revocation and reissuance. The following are causes to modify or, alternatively, revoke and reissue a permit:

(a) Cause exists for termination under Section 4 of this administrative regulation and the Cabinet determines that modification or revocation and reissuance is appropriate.

(b) The Cabinet has received notification (as required in the permit in Section 1(12)(c) of 401 KAR 38:030) of a proposed transfer of the permit.

(c) Cause exists for termination under Section 2(1)(e) and (f) of this administrative regulation, and the Cabinet determines that modification or revocation and reissuance is appropriate.

(3) Facility siting. Suitability of the facility location will not be considered at the time of permit modification or revocation and reissuance unless new information or standards indicate that a threat to human health or the environment exists which was unknown at the time of permit issuance.

(4) Major modifications that include changes in ownership and operational control of a facility may be made if the new owner or operator submits a revised permit application no later than ninety (90) days prior to the scheduled change. A change in ownership or operational control includes a transfer of twenty-five (25) or more percent interest in the corporation, joint venture, partnership, proprietorship, or entity designated to own or operate the hazardous waste site or facility. When a transfer of ownership or operational control of a site or facility occurs, the old owner or operator shall comply with the requirements of 401 KAR 34:080 to 401 KAR 34:176 (financial requirements), until the new owner or operator has demonstrated to the Cabinet that he is complying with the requirements in 401 KAR 34:080 to 401 KAR 34:176. The new owner or operator shall demonstrate compliance with the requirements in 401 KAR 34:080 to 401 KAR 34:176 within six (6) months of the date of the change in the ownership or operational control of the site or facility. Upon demonstration to the Cabinet by the new owner or operator of compliance with the requirements in 401 KAR 34:080 to 401 KAR 37:176, the Cabinet shall notify the old owner or operator in writing that he no longer needs to comply with the requirements in 401 KAR 34:080 to 401 KAR 34:176 as of the date of demonstration. Past performance as specified in Section 2(20) of 401 KAR 38:090 shall be considered. The provisions set forth in Section 3 of this administrative regulation as amended on March 10, 1988, shall apply to requests for modification received by the Cabinet prior to November 14, 1990, and including all additional information and documentation submitted subsequent to November 14, 1990, as requested by the Cabinet.

**Section 3. Minor Modifications of Permits.** Upon consent of the permittee, the Cabinet may modify a permit to make the corrections or allowances for changes in the permitted activity listed in this section, without following the procedures of 401 KAR 38:050. Any permit modification not processed as a minor modification under this section shall be made for cause and



with a 401 KAR 38:050 draft permit, public notice as required in Section 2 of this administrative regulation and, if applicable, compliance with 401 KAR 38:500 shall be demonstrated.

(1) The permittee shall put into effect minor modifications listed in subsection (3) of this section under the following conditions:

(a) The permittee shall inform the Cabinet concerning the modification by certified mail or other means that establish proof of delivery within seven (7) calendar days after the change is put into effect. This notice shall specify the changes being made to permit conditions or supporting documents referenced by the permit, and shall explain why they are necessary. Along with the notice, the permittee shall provide a completed notification of minor modifications to hazardous waste permits not requiring prior approval of the Cabinet, as incorporated by reference in subsection (2) of this section. The permittee shall also provide the applicable information from Parts A and B of the Kentucky Hazardous Waste Permit Application as it relates to the specific type of facility.

(b) The permittee shall send a notice of the modification to all persons on the facility mailing list and the appropriate units of local government. This notification shall be made within ninety (90) calendar days after the Cabinet approves the request.

(c) Any person may request that the Cabinet review, and the Cabinet may, for cause, reject any minor modification. The Cabinet shall inform the permittee by certified mail that a minor modification has been rejected, explaining the reasons for the rejection. If a minor modification has been rejected, the permittee shall comply with the original permit conditions.

(d) Minor modifications listed in subsection (3) of this section requiring "Prior Approval" shall be made only with the prior written approval of the Cabinet.

(e) For a minor modification, the permittee may elect to follow the procedures for major modifications instead of the minor modifications procedures. The permittee shall inform the Cabinet of this decision in the notice required in Section 2 of this administrative regulation.

(2) Form DEP 7092 entitled "Notification of Minor Modifications to Hazardous Waste Permits Not Requiring Prior Approval of the Cabinet" (July 1996) is hereby incorporated by reference. This form is available at the Hazardous Waste Branch, Division of Waste Management, 14 Reilly Road, Frankfort, Kentucky 40601, (502) 564-6716, between 8 a.m. and 4:30 p.m., eastern time, Monday through Friday, except on state holidays.

(3) The following shall be used to determine whether prior approval is required for a minor modification:

#### CLASSIFICATION OF PERMIT MINOR MODIFICATION (1 OF 6)

Type of Minor Modification		Prior Approval	Notification
(a) General Permit Provisions			
1.	Administrative and informative changes		X
2.	Correction of typographical errors		X

3.	Equipment replacement or up grading with functionally equivalent components (e.g. pipes, valves, pumps, conveyors, controls).		X
4.	Changes to provide for more frequent monitoring, reporting, sampling, or maintenance activities by the permittee.		X
5.	Changes in interim compliance dates.	X	
(b) General Facility Standards:			
1.	Changes to waste sampling or analysis methods to conform with agency guidelines or administrative regulations.	X	
2.	Changes associated with F039 (multisource leachate) sampling or analysis methods.	X	
3.	To incorporate changes associated with underlying hazardous constituents in ignitable or corrosive waste.	X	
4.	Changes to analytical quality assurance or the quality control plan to conform with agency administrative regulations.	X	
5.	Changes in the training plan, except to decrease the amount of training or type of training.	X	
6.	Changes in names, address or phone number of coordinators or other persons or agencies identified in the contingency plan.	X	
7.	Changes that the Construction Quality Assurance officer certifies in the operating record will provide equivalent or better certainty that the unit components meet the design standards.		X
8.	Other Construction Quality Assurance changes	X	
(c) Groundwater Protection:			
1.	Replacement of an existing well that has been damaged or rendered inoperable, without change to location, design, or depth of the well.		X

2.	Changes in groundwater sampling or analysis procedures or monitoring schedule.	X	
3.	Changes in statistical procedure for determining whether a statistically significant change in groundwater quality between upgradient and downgradient wells has occurred.	X	
(d) Closure:			
1.	Changes to the closure plan in estimate of maximum extent of operations or maximum inventory of waste on-site at any time during the active life of the facility.	X	
2.	Changes in the closure schedule for any unit, changes in the final closure schedule for the facility, or extension of the closure period.	X	
3.	Changes in the expected year of final closure, where other permit conditions are not changed.	X	
4.	Changes in procedures for decontamination of facility equipment or structures.	X	
5.	Changes in approved closure plan resulting from unexpected events occurring during partial or final closure, unless otherwise specified in this section.	X	
6.	Extension of the closure period to allow a landfill, surface impoundment or land treatment unit to receive non-hazardous wastes after final receipt of hazardous wastes under Section 4(4) and (5) of 401 KAR 34:070.	X	
(e) Postclosure:			
1.	Changes in name, address, or phone number of contact in post-closure plan.	X	
2.	Changes to the expected year of final closure, where other permit conditions are not changed.	X	
(f) Containers:			
1.	Addition of a roof to a container unit without alteration of the containment system.		X

(g) Tanks:		
1.	Addition of a new tank that will operate for up to ninety (90) days using any of the following physical or chemical treatment technologies: neutralization, dewaterizing, phase separation, or component separation.	X
2.	Replacement of a tank with a tank that meets the same design standards and has a capacity within +/- ten (10) percent of the replaced tank provided: <ul style="list-style-type: none"> <li>a. The capacity difference is no more than 1500 gallons.</li> <li>b. The facility's permitted tank capacity is not increased.</li> <li>c. The replacement tank meets the same conditions in the permit.</li> </ul>	X
(h) Surface Impoundments:		
1.	Modifications of unconstructed units to comply with 401 KAR 34:200.	X
2.	Changes in response action plan.	X
a.	Increase in action leakage rate.	X
b.	Changes in specific response reducing its frequency or effectiveness.	X
c.	Other changes.	X
3.	Other changes.	X
(i) Enclosed Waste Piles:		
1.	Replacement of a waste pile unit with another waste pile unit of the same design and capacity and meeting all waste pile conditions in the permit.	X
2.	Conversion of an enclosed waste pile to a containment building unit.	X
(j) Landfills and Unenclosed Waste Piles:		

1.	Modifications of unconstructed units to comply with 401 KAR 34:210.	X	
2.	Changes in response action plan.	X	
a.	Increase in action leakage rate.	X	
b.	Change in a specific response reducing its frequency or effectiveness.	X	
c.	Other changes in response action plan.	X	
3.	Other changes.	X	
(k) Land Treatment:			
1.	Modification of a land treatment unit management practice to decrease rate of waste application.		X
2.	Changes in any condition specified in the permit for a land treatment unit to reflect results of the land treatment demonstration, provided performance standards are met.	X	
3.	Changes to allow a second land treatment demonstration to be conducted when the results of the first demonstration conducted have not shown the conditions under which the waste can be treated completely, provided the conditions for the second demonstration are substantially the same as the conditions for the first demonstration. In addition, the land treatment waste application rate cannot exceed previously established waste application rates.	X	
(l) Incinerators - Shakedown and Trial Burn:			
1.	Authorization of up to an additional 720 hours of waste incineration during the shakedown period for determining operational readiness after construction.	X	
2.	Minor changes in the operating requirements set in the permit for conducting a trial burn.	X	

3.	Minor changes in the ranges of the operating requirements set in the permit to reflect the results of the trial burn.	X	
(m) Containment Buildings:			
1.	Modification or addition of containment building units resulting in up to 25% increase in the facility's containment building storage or treatment capacity.	X	
2.	Modification of a containment building unit or secondary containment system without increasing the capacity of the unit.	X	
3.	Replacement of a containment building that meets the same design standards provided:		
a.	The unit capacity is not increased; or		X
b.	The replacement containment building meets the same conditions in the permit.		X
4.	Modification of a containment building management practice.	X	
5.	Storage or treatment of different wastes in containment buildings that do not require additional or different management practices.	X	
(n) Corrective Action:			
1.	Approval of a corrective action management unit pursuant to Section 1 of 401 KAR 34:287.	X	
2.	Approval of a temporary unit or time extension for a temporary unit pursuant to Section 2 of 401 KAR 34:287.	X	

#### Section 4. Termination of Permits.

(1) The Cabinet may terminate a permit during its term or deny a permit renewal application for the following causes:

- (a) Noncompliance by the permittee with any condition of the permit;
- (b) The permittee's failure in the application or during the permit issuance process to disclose fully all relevant facts, or the permittee's misrepresentation of any relevant facts at any time;

(c) A determination that the permitted activity endangers human health or the environment and can only be regulated to acceptable levels by permit modification or termination; or

(d) A violation of any requirement of KRS Chapter 224 or the respective administrative regulations promulgated pursuant thereto (including 401 KAR 40:040).

(2) The Cabinet shall follow the applicable procedures in this administrative regulation and in 401 KAR 38:050 and 401 KAR Chapter 40 in terminating any permit under this section.

#### **Section 5. Duration of Permit.**

(1) Term of permit. Hazardous waste site or facility permits shall be effective for a fixed term not to exceed ten (10) years. (See also Section 5 of 401 KAR 38:060.)

(2) Modification of term of permit. Except as provided in Section 6 of this administrative regulation, the term of a permit shall not be extended by modification beyond the maximum duration specified in subsection (1) of this section.

(3) Reduced term of permit. The Cabinet may issue any permit for a duration that is less than the full allowable term under subsection (1) of this section.

(4) Each permit for a land disposal facility shall be reviewed by the Cabinet five (5) years after the date of permit issuance or reissuance and shall be modified as necessary, as provided in Section 2 of this administrative regulation.

(5) A permit for the nerve agents specified in KRS 224.50-130 shall be reviewed by the Cabinet five (5) years after the date of permit issuance or reissuance and shall be modified as necessary, as provided in Section 2 of this administrative regulation.

#### **Section 6. Continuation of Expiring Permits.**

(1) The conditions of an expired permit continue in force until the effective date of a new permit if:

(a) The permittee has submitted a timely application under 401 KAR 38:090 and 401 KAR 38:100 and the applicable requirements in 401 KAR 38:150 to 401 KAR 38:210 and which is a complete (under Section 1(3) of 401 KAR 38:070) application for a new permit, paid the appropriate fees due (under 401 KAR Chapter 39 and KRS 224.46-016 through 224.46-018); and

(b) The Cabinet, through no fault of the permittee, does not issue a new permit with an effective date on or before the expiration date of the previous permit (for example, when issuance is impracticable due to time or resources constraints).

(2) Effect. Permits continued under this section remain fully effective and enforceable.

(3) Enforcement. When the permittee is not in compliance with the conditions of the expiring or expired permit, the Cabinet may choose to do any or all of the following:

(a) Initiate enforcement action based upon the permit which has been continued;

(b) Issue a notice of intent to deny the new permit under Section 3 of 401 KAR 38:050. If the permit is denied, the owner or operator would then be required to cease the activities authorized by the continued permit or be subject to enforcement action for operating without a permit;

(c) Issue a new permit under 401 KAR 38:050 with appropriate conditions; or

(d) Take other actions authorized by 401 KAR Chapters 30 to 40.

(4) State continuation. As provided in 40 C.F.R 270.51(d), an EPA issued permit shall not continue in force beyond its expiration date under federal law if at that time the Cabinet is the RCRA permitting authority.



**Effective Date - March 12, 1997**

**401 KAR 38:050. Public Information Procedures.**

**RELATES TO:** KRS 224.01, 224.10, 224.40, 224.43, 224.46, 224.99, 40 CFR 124 Subpart A

**STATUTORY AUTHORITY:** KRS 224.40-305, 224.46-520

**NECESSITY AND FUNCTION:** KRS 224.40-305 and 224.46-520 require any person who treats, stores, recycles or disposes of hazardous waste to first obtain a hazardous waste site or facility permit from the Cabinet. This chapter establishes the permitting process for hazardous waste sites or facilities and establishes standards on public information procedures and confidentiality.

**Section 1. Application for a Permit.**

(1)(a) Any person who requires a hazardous waste site or facility permit under KRS Chapter 224 shall complete, sign, and submit to the Cabinet an application for each permit required under Section 1 of 401 KAR 38:010. Applications are not required for hazardous waste site or facility permits by rule (Section 1 of 401 KAR 38:060) or underground injections authorized by rule. However, for all facilities, including underground injection wells, which meet the definition of a disposal facility (see 401 KAR 30:010), compliance with the requirements of 401 KAR 38:500 (Provisions for approval by the local government or the Kentucky Regional Integrated Treatment and Disposal Facility Siting Board), if applicable, shall be demonstrated to the Cabinet prior to construction or operation under a permit by rule.

(b) The Cabinet shall not begin the processing of a permit until the applicant has fully complied with the application requirements for that permit (see Sections 1 through 6 of 401 KAR 38:070, 401 KAR 38:080 and the applicable requirements in 401 KAR 38:150 through 38:210). Applications shall be processed in accordance with 401 KAR 38:010.

(c) Permit applications shall comply with the signature and certification requirements of Section 7 of 401 KAR 38:070.

(2) Upon completing the review, the Cabinet shall notify the applicant in writing whether the application is complete or incomplete. If the application is incomplete, the Cabinet shall list the information necessary to make the application complete. When the application is for an existing hazardous waste site or facility, the Cabinet shall specify in the notice of deficiency a date for submitting the necessary information. The Cabinet may notify the applicant that the application is complete upon receiving this information. Any application, complete or incomplete, may be denied based on the considerations set forth in KRS 224.46-520.

(3) If an applicant fails or refuses to correct deficiencies in the application or if the applicant fails or refuses to submit additional information, the permit may be denied and appropriate enforcement actions may be taken under the applicable statutory provision.

(4) If the Cabinet decides that a site visit is necessary for any reason in conjunction with the processing of an application, a representative of the Cabinet shall notify the applicant and a date shall be scheduled.

(5) The effective date of an application is the date on which the Cabinet notifies the applicant that the application is complete as provided in subsection (2) of this section.

(6) For each application, the Cabinet shall, no later than the effective date of the application, prepare and mail to the applicant a project decision schedule. The schedule shall specify target dates by which the Cabinet intends to:

- (a) Prepare a draft permit;
- (b) Give public notice;
- (c) Complete the public comment period, including any public hearing; and
- (d) Issue a final permit.

## **Section 2. Modification, Revocation and Reissuance, or Termination of Permits.**

(1) A permit for a hazardous waste site or facility may be modified, revoked and reissued, or terminated either at the request of any interested person (including the permittee) or upon the Cabinet's initiative. However, a permit may only be modified, revoked and reissued, or terminated for the reasons specified in Sections 2 and 4 of 401 KAR 38:040 and following the procedures of 401 KAR Chapter 40. All requests shall be in writing and shall contain facts or reasons supporting the request.

(2) If the Cabinet decides the request is not justified, the Cabinet shall send the requester a brief written response giving a reason for the decision. Denials of requests for modification, revocation and reissuance, or termination are not subject to public notice, comment, or hearings.

(3)(a) If the Cabinet tentatively decides to modify or revoke and reissue a permit under Section 2 of 401 KAR 38:040, the Cabinet shall prepare a draft permit under Section 3 of this administrative regulation incorporating the proposed changes. The Cabinet may request additional information and, in the case of a modified permit, may require the submission of an updated permit application. In the case of revoked and reissued permits, the Cabinet shall require the submission of a new application.

(b) In a permit modification under this section, only those conditions to be modified shall be reopened when a new draft permit is prepared. All other aspects of the existing permit shall remain in effect for the duration of the unmodified permit. When a permit is revoked and reissued under this section, the entire permit is reopened just as if the permit had expired and was being reissued. During any revocation and reissuance proceeding the permittee shall comply with all conditions of the existing permit until a new final permit is reissued.

(c) "Minor modifications" as identified in Section 3 of 401 KAR 38:040 are not subject to the requirements of this section.

(4) If the Cabinet tentatively decides to terminate a permit under Section 4 of 401 KAR 38:040, it shall issue a notice of intent to terminate. A notice of intent to terminate is a type of draft permit which follows the same procedures as any draft permit prepared under Section 3 of this administrative regulation.

(5) All draft permits (including notices of intent to terminate) prepared under Sections 3 through 5 of this administrative regulation shall be based on the administrative record as defined in Section 6 of this administrative regulation.

### **Section 3. Draft Permits.**

(1) Once an application is complete, the Cabinet shall tentatively decide whether to prepare a draft permit or to deny the application. In making this determination the Cabinet shall consider the requirements specified in the waste management administrative regulations and in KRS 224.46-520.

(2) If the Cabinet tentatively decides to deny the permit application, it shall issue a notice of intent to deny. A notice of intent to deny the permit application is a type of draft permit which follows the same procedures as any draft permit prepared under this subsection (see subsection (4)). If the Cabinet's final decision is that the tentative decision to deny the permit application was incorrect, the Cabinet shall withdraw the notice of intent to deny and proceed to prepare a draft permit under subsection (3) of this section.

(3) If the Cabinet decides to prepare a draft permit, the draft permit shall contain the following information:

- (a) All conditions under Sections 1 and 3 of 401 KAR 38:030;
- (b) All compliance schedules under Section 4 of 401 KAR 38:030;
- (c) All monitoring requirements under Section 2 of 401 KAR 38:030; and
- (d) Standards for treatment, storage or disposal, and other permit conditions under Section 1 of 401 KAR 38:030.

(4) All draft permits prepared by the Cabinet under this section shall be accompanied by a statement of basis (see Section 4 of this administrative regulation) or fact sheet (see Section 5 of this administrative regulation) and shall be based on the administrative record (see Section 6 of this administrative regulation) and publicly noticed (see Section 7 of this administrative regulation), and shall be made available for public comment (see Section 8 of this administrative regulation). The Cabinet shall give notice of the opportunity for a public hearing as required by KRS 224.40-310 (see Section 9 of this administrative regulation), issue a final decision and respond to comments (see Section 11 of this administrative regulation). An appeal may be taken under KRS 224.10-420.

**Section 4. Statement of Basis.** The Cabinet shall prepare a statement of basis for every draft permit for which a fact sheet under Section 5 of this administrative regulation is not prepared. The statement of basis shall briefly describe the derivation of the conditions of the draft permit and the reasons for them or, in the case of notices of intent to deny or terminate, reasons supporting the tentative decision. The statement of basis shall be sent to the applicant and, on request, to any other person.

### **Section 5. Fact Sheet.**

(1) A fact sheet shall be prepared for every draft permit for a hazardous waste site or facility which includes an incinerator, a surface impoundment, disposal facility (landfill, land treatment facility, injection well, for example), or a research, development, and demonstration facility, and for every draft permit which the Cabinet finds is the subject of widespread public interest or raises major issues. The fact sheet shall briefly set forth the principal facts and the significant factual, legal, methodological and policy questions considered in preparing the draft permit. The Cabinet shall send this fact sheet to the applicant and, on request, to any other person.

(2) The fact sheet shall include, when applicable:

- (a) A brief description of the type of facility or activity which is the subject of the draft permit;
- (b) The type and quantity of wastes, fluids, or pollutants which are proposed to be or are being treated, stored, disposed of, injected, emitted, or discharged;
- (c) A brief summary of the basis for the draft permit conditions including references to applicable statutory or regulatory provisions and appropriate supporting references to the administrative record required by Section 6 of this administrative regulation;
- (d) Reasons why any requested variances or alternatives to required standards do or do not appear justified;
- (e) A description of the procedures for reaching a final decision on the draft permit including:
  - 1. The beginning and ending dates of the comment period under Section 7 of this administrative regulation and the address where comments shall be received;
  - 2. Procedures for requesting a hearing and the nature of that hearing; and
  - 3. Any other procedures by which the public may participate in the final decision.
- (f) Name and telephone number of a person to contact for additional information.

#### **Section 6. Administrative Record for Draft Permits.**

- (1) The provisions of a draft permit prepared by the Cabinet under Section 3 of this administrative regulation shall be based on the administrative record defined in this section.
- (2) For preparing a draft permit under Section 3 of this administrative regulation, the record shall consist of:
  - (a) The application, if required, and any supporting data furnished by the applicant;
  - (b) The draft permit or notice of intent to deny the application or to terminate the permit;
  - (c) The statement of basis (see Section 4 of this administrative regulation) or fact sheet (see Section 5 of this administrative regulation);
  - (d) All documents cited in the statement of basis or the fact sheet; and
  - (e) Other documents contained in the supporting file for the draft permit.
- (3) Material readily available at the Cabinet's office or published material that is generally available, and that is included in the administrative record under this subsection and subsection (2) of this section, need not be physically included with the rest of the record as long as it is specifically referred to in the statement of basis or the fact sheet.
- (4) This section applies to all draft permits when public notice was given after the effective date of these administrative regulations.

#### **Section 7. Public Notice of Permit Application and Public Comment Period.**

- (1) Scope.
  - (a) The Cabinet shall give public notice under KRS 224.40-310(4) and (5) that the following actions have occurred:
    - 1. A permit application has been tentatively denied under Section 3(2) of this administrative regulation;
    - 2. A draft permit has been prepared under Section 3(3) of this administrative regulation;
    - 3. A hearing has been scheduled under Section 9 of this administrative regulation; and

4. An appeal has been granted under 401 KAR 40:030.
- (b) No public notice is required when a request for permit modification, revocation and reissuance, or termination is denied under Section 2(2) of this administrative regulation. Written notice of that denial shall be given to the requester and to the permittee.
- (c) Public notices may describe more than one (1) permit or permit action.
- (2) Timing.
- (a) Public notice of the preparation of a draft permit (including a notice of intent to deny a permit application) required under subsection (1) of this section shall allow at least forty-five (45) days for public comment.
- (b) Public notice of a public hearing shall be given at least thirty (30) days before the hearing. (Public notice of the hearing may be given at the same time as public notice of the draft permit and the two (2) notices may be combined.)
- (3) Methods. Public notice of activities described in subsection (1)(a) of this section shall be given by the following methods:
  - (a) By mailing a copy of a notice to the following persons (any person otherwise entitled to receive notice under this subparagraph may waive his or her rights to receive notice for any classes and categories of permits):
    1. The applicant;
    2. Any other agency which the Cabinet knows has issued or is required to issue an environmental permit for the same facility or activity (including United States Environmental Protection Agency);
    3. Federal and state agencies with jurisdiction over fish, shellfish, and wildlife resources and over coastal zone management plans, the Advisory Council on Historic Preservation, State Historic Preservation Officers, and other appropriate government authorities, including any other affected states;
    4. Persons on a mailing list developed by:
      - a. Including those who request in writing to be on the list;
      - b. Soliciting persons for "area lists" from participants in past permit proceedings in that area; and
      - c. Notifying the public of the opportunity to be put on the mailing list through periodic publication in the public press and in such publications as regional and state funded newsletters, environmental bulletins, or state law journals. (The Cabinet may update the mailing list from time to time by requesting written indication of continued interest from those listed. The Cabinet may delete from the list the name of any person who fails to respond to such a request.)
  5. To any unit of local government having jurisdiction over the area where the facility is proposed to be located; and
  6. To each state agency having any authority under state law with respect to the construction or operation of such facility.
- (b) Publication of a notice in a daily or weekly major local newspaper of general circulation as required by KRS 224.40-310(2), (4), and (5) and broadcast over any commercial radio stations which have general coverage in the locality where the proposed site is located.

(c) Any other method reasonably calculated to give actual notice of the action in question to the persons potentially affected by it, including press releases or any other forum or medium to elicit public participation.

(4) Contents.

(a) All public notices. All public notices issued under this chapter shall contain the following minimum information:

1. Name and address of the office processing the permit action for which notice is being given;
2. Name and address of the permittee or permit applicant and, if different, of the facility or activity regulated by the permit;
3. A brief description of the business conducted at the facility or activity described in the permit application;
4. Name, address and telephone number of a person from whom interested persons may obtain further information, including copies of the draft permit, statement of basis or fact sheet, and the application;
5. A brief description of the comment procedures required by Sections 8 and 9 of this administrative regulation and the time and place of any hearing that will be held, including a statement of procedures to request a hearing (unless a hearing has already been scheduled) and other procedures by which the public may participate in the final permit decision;
6. The location of the administrative record required by Section 6 of this administrative regulation, the times at which the record will be open for public inspection, and a statement that all data submitted by the applicant is available as part of the administrative record;
7. The statement contained in KRS 224.40-310(5)(e); and
8. Any additional information considered necessary or proper.

(b) Public notices for hearings. In addition to the general public notice described in subsection (4)(a) of this section, the public notice of a hearing under Section 9 of this administrative regulation shall contain the following information:

1. Reference to the date of previous public notices relating to the permit;
2. Date, time, and place of the hearing; and
3. A brief description of the nature and purpose of the hearing, including the applicable rules and procedures.

(5) In addition to the general public notice described in subsection (4)(a) of this section, all persons identified in subsection (3)(a) of this section shall be mailed a copy of the fact sheet or statement of basis, the permit application (if any) and the draft permit (if any). The Cabinet shall charge for duplication cost and postage.

**Section 8. Public Comments and Requests for Public Hearings.** During the public comment period provided under Section 7 of this administrative regulation, any interested person may submit written comments on the draft permit and may request a public hearing if no hearing has already been scheduled. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. All comments shall be considered in making the final decision and shall be answered as provided in Section 11 of this administrative regulation.

**Section 9. Public Hearings.**

(1)(a) The Cabinet shall hold a public hearing on the basis of requests, when a significant degree of public interest in a draft permit(s) is found.

(b) The Cabinet at its discretion may also hold a public hearing whenever, for instance, such a hearing might clarify one (1) or more issues involved in the permit decision.

(c) 1. The Cabinet shall hold a public hearing whenever written notice of opposition to a draft permit and a request for a hearing within forty-five (45) days of public notice under Section 7(2)(a) of this administrative regulation is received.

2. Whenever possible the Cabinet shall schedule a hearing under this section at a location convenient to the population center nearest to the proposed facility provided the hearing location is in the same county as required by KRS 224.40-310.

(d) Public notice of the hearing shall be given as specified in Section 7 of this administrative regulation.

(2) Whenever a public hearing is held, the Cabinet shall designate a presiding officer for the hearing who shall be responsible for its scheduling and orderly conduct.

(3) Any person may submit oral or written statements and data concerning the draft permit. Reasonable limits may be set upon the time allowed for oral statements, and the submission of statements in writing may be required. The public comment period under Section 7 of this administrative regulation shall automatically be extended to the close of any public hearing under this administrative regulation. The hearing officer may also extend the comment period by so stating at the hearing.

(4) A tape recording or written transcript of the hearing shall be made available to any person upon payment of the actual cost of reproducing the original.

**Section 10. Reopening of the Public Comment Period.**

(1) If any data, information or arguments submitted during the public comment period (including information or arguments that any condition of the draft permit or permit denial is inappropriate) appear to raise substantial new questions concerning a permit, the Cabinet may take one (1) or more of the following actions:

(a) Prepare a new draft permit, appropriately modified, under Section 3 of this administrative regulation;

(b) Prepare a revised statement of basis under Section 4 of this administrative regulation and reopen the comment period under this section; or

(c) Reopen or extend the comment period under Section 7 of this administrative regulation to give interested persons an opportunity to comment on the information or arguments submitted.

(2) Comments filed during the reopened comment period shall be limited to the substantial new questions that caused its reopening. The public notice under Section 7 of this administrative regulation shall define the scope of the reopening.

(3) The Cabinet may also, in the circumstances described above, elect to hold further proceedings. This decision may be combined with any of the actions enumerated in subsection (1) of this section.

(4) Public notice of any of the above actions shall be issued under Section 7 of this administrative regulation.

**Section 11. Response to Comments.**

(1) At the time that any final permit decision is issued, the Cabinet shall issue a response to comments when a final permit is issued. This response shall:

(a) Specify which provisions, if any, of the draft permit have been changed in the final permit decision, and the reasons for the change; and

(b) Briefly describe and respond to all significant comments on the draft permit raised during the public comment period, or during any hearing.

(2) For Cabinet issued permits, any documents cited in the response to comments shall be included in the administrative record for the final permit decision. If new points are raised or new material supplied during the public comment period, the Cabinet may document its response to those matters by adding new materials to the administrative record.

(3) The response to comments shall be available to the public.

(4) In the case of a hazardous waste disposal site or facility, no permit shall be approved or issued by the Cabinet prior to the approvals specified in KRS 224.40-310(5) and (6). 401 KAR 38:500 details the procedures that the applicant shall use in obtaining local government approval for incinerators or land disposal facilities or for a regional integrated waste treatment and disposal demonstration facility, the approval of the Kentucky Regional Integrated Waste Treatment and Disposal Facility Siting Board.

**Section 12. Issuance and Effective Date of Permit.**

(1) After the close of the public comment period under Section 7 of this administrative regulation on a draft permit, the Cabinet shall issue a final permit decision (or a decision to deny a permit for the active life of a hazardous waste management facility or unit under Section 11 of 401 KAR 38:070). For the purposes of this section, a final permit decision means a final decision to issue, deny, modify, revoke and reissue, or terminate a permit.

(2) A final permit decision shall become effective on the date issued by the Cabinet.

**Section 13. Past Performance Considered in Review.** Past performance of the owner or operator shall be considered in the review and in the determination of any requirement for specialized conditions.

**Section 14. Pre-application Public Meeting and Notice.**

(1) **Applicability.** The requirements of this section shall apply to all hazardous waste Part B applications seeking initial permits for hazardous waste management units over which the Cabinet has permit issuance authority. The requirements of this section shall also apply to hazardous waste Part B applications seeking renewal of permits for such units, where the renewal application is proposing a significant change in facility operations. For the purposes of this section, a "significant change" is any change that would qualify as a major modification under Section 2 of 401 KAR 38:040. The requirements of this section do not apply to permit minor modifications under



Section 3 of 401 KAR 38:040 or to applications that are submitted for the sole purpose of conducting post-closure activities or post-closure activities and corrective action at a facility.

(2) Prior to the submission of a Part B hazardous waste permit application for a facility, the applicant shall hold at least one (1) meeting with the public in order to solicit questions from the community and inform the community of proposed hazardous waste management activities. The applicant shall post a sign-in sheet or otherwise provide a voluntary opportunity for attendees to provide their names and addresses.

(3) The applicant shall submit a summary of the meeting, along with the list of attendees and their addresses developed under subsection (2) of this section, and copies of any written comments or materials submitted at the meeting, to the Cabinet as a part of the Part B application, in accordance with Section 2(26) of 401 KAR 38:090.

(4) The applicant shall provide public notice of the pre-application meeting at least 30 days prior to the meeting. The applicant shall maintain, and provide to the Cabinet upon request, documentation of the notice.

(a) The applicant shall provide public notice in all of the following forms:

1. A newspaper advertisement. The applicant shall publish a notice, fulfilling the requirements in paragraph (b) of this subsection, in a newspaper of general circulation in the county or equivalent jurisdiction that hosts the proposed location of the facility. In addition, the Cabinet shall instruct the applicant to publish the notice in newspapers of general circulation in adjacent counties or equivalent jurisdictions, where the Cabinet determines that such publication is necessary to inform the affected public. The notice shall be published as a display advertisement.

2. A visible and accessible sign. The applicant shall post a notice on a clearly marked sign at or near the facility, fulfilling the requirements in paragraph (b) of this subsection. If the applicant places the sign on the facility property, then the sign shall be large enough to be readable from the nearest point where the public would pass by the site.

3. A broadcast media announcement. The applicant shall broadcast a notice, fulfilling the requirements in paragraph (b) of this subsection, at least once on at least one local radio stations or television station. The applicant may employ another medium with prior approval of the Cabinet.

4. A notice to the Cabinet. The applicant shall send a copy of the newspaper notice to the Cabinet and to the appropriate units of state and local government, in accordance with Section 7(3) of this administrative regulation.

(b) The notices required under paragraph (a) of this subsection shall include:

1. The date, time, and location of the meeting;

2. A brief description of the purpose of the meeting;

3. A brief description of the facility and proposed operations, including the address or a map (for example, a sketched or copied street map) of the facility location;

4. A statement encouraging people to contact the facility at least 72 hours before the meeting if they need special access to participate in the meeting; and

5. The name, address, and telephone number of a contact person for the applicant.

#### **Section 15. Public Notice Requirements at the Application Stage.**

(1) Applicability. The requirements of this section shall apply to all hazardous waste Part B applications seeking initial permits for hazardous waste management. The requirements of this

section shall also apply to hazardous waste Part B applications seeking renewal of permits for such units under Section 6 of 401 KAR 38:040. The requirements of this section do not apply to permit modifications under Section 3 of 401 KAR 38:040 or permit applications submitted for the sole purposed of conducting post-closure activities or post-closure activities and corrective action at a facility.

(2) Notification at application submittal.

(a) The Cabinet shall provide public notice as set forth in Section 7(3) of this administrative regulation, that a Part B permit application has been submitted to the Cabinet and is available for review.

(b) The notice shall be published within a reasonable period of time after the application is received by the Cabinet. The notice shall include:

1. The name and telephone number of the applicant's contact person;
2. The name and telephone number of the Cabinet's contact office, and a mailing address to which information, opinions, and inquiries may be directed throughout the permit review process;
3. An address to which people can write in order to be put on the facility mailing list;
4. The location where copies of the permit application and any supporting documents can be viewed and copied;
5. A brief description of the facility and proposed operations, including the address or a map (for example, a sketched or copied street map) of the facility location on the front page of the notice; and
6. The date that the application was submitted.

(3) Concurrent with the notice required under subsection (2) of this section, the Cabinet shall place the permit application and any supporting documents in a location accessible to the public in the vicinity of the facility or at the Division of Waste Management, 14 Reilly Road, Frankfort, Kentucky 40601.

#### **Section 16. Information Repository.**

(1) Applicability. The requirements of this section apply to applications seeking permits for hazardous waste management units.

(2) The Cabinet may assess the need, on a case-by-case basis, for an information repository. When assessing the need for an information repository, the Cabinet shall consider a variety of factors, including: the level of public interest; the type of facility; the presence of an existing repository; and the proximity to the nearest copy of the administrative record. If the Cabinet determines, at any time after submittal of a permit application, that there is a need for a repository, the Cabinet shall notify the facility that the facility shall establish and maintain an information repository. (See Section 1(13) of 401 KAR 38:030 for similar provisions relating to the information repository during the life of a permit).

(3) The information repository shall contain all documents, reports, data, and information deemed necessary by the Cabinet to fulfill the purposes for which the repository is established. The Cabinet shall have the discretion to limit the contents of the repository.

(4) The information repository shall be located and maintained at a site chosen by the facility. If the Cabinet finds the site unsuitable for the purposes and persons for which it was

established, due to problems with the location, hours of availability, access, or other relevant considerations, then the Cabinet shall specify a more appropriate site.

(5) The Cabinet shall specify requirements for informing the public about the information repository. At a minimum, the Cabinet shall require the facility to provide a written notice about the information repository to all individuals on the facility mailing list.

(6) The facility owner or operator shall be responsible for maintaining and updating the repository with appropriate information throughout a time period specified by the Cabinet. The Cabinet may close the repository at its discretion, based on the factors in subsection (2) of this section.

Effective Date - March 12, 1997

**401 KAR 38:060. Special Types of Permits.**

**RELATES TO:** KRS 224.01, 224.10, 224.40, 224.43, 224.46, 224.99, 40 CFR 270 Subpart F

**STATUTORY AUTHORITY:** KRS 224.10-100, 224.46-520

**NECESSITY AND FUNCTION:** To implement provisions of KRS 224.40-305 and 224.46-520 and to establish standards for special types of permits.

**Section 1. Permit by Rule.** Notwithstanding any other provision of this chapter the following shall be deemed to have a permit by rule if the conditions listed are met:

(1) Ocean disposal barges or vessels. The owner or operator of a barge or other vessel which accepts hazardous waste for ocean disposal, if the owner or operator:

- (a) Has a permit for ocean disposal issued by the EPA;
- (b) Complies with the conditions of that permit; and
- (c) Complies with the following hazardous waste administrative regulations:
  - 1. Section 2 of 401 KAR 34:020, Identification Number;
  - 2. Section 2 of 401 KAR 34:050, Use of Manifest System;
  - 3. Section 3 of 401 KAR 34:050, Manifest Discrepancies;
  - 4. Section 4(1) and (2)(a) of 401 KAR 34:050, Operating Record;
  - 5. Section 6(1) and (2)(a) of 401 KAR 34:050, Annual Report; and
  - 6. Section 7 of 401 KAR 34:050, Unmanifested Waste Report.

(2) Injection wells. The owner or operator of an injection well disposing of hazardous waste, if the owner or operator:

- (a) Has a permit for underground injection issued by the U.S. EPA under 40 CFR Part 144 or 145;
- (b) Complies with the conditions of that permit and the requirements of 40 CFR 144.14 (wells managing hazardous waste);
- (c) For UIC permits issued after November 8, 1984:
  - 1. Complies with Section 12 of 401 KAR 34:060; and
  - 2. Where the UIC well is the only unit at a facility which requires a hazardous waste site or facility permit, complies with Section 3 of 401 KAR 38:100.

(d) Complies with the requirements of 401 KAR 38:500, if applicable.

(3) Publicly owned treatment works (POTW). The owner or operator of a POTW which accepts hazardous waste for treatment, if the owner or operator:

- (a) Has an NPDES permit or a KPDES permit issued under the authorized program;
- (b) Complies with the conditions of that permit; and
- (c) Complies with the following administrative regulations:
  - 1. Section 2 of 401 KAR 34:020, Identification Number;

2. Section 2 of 401 KAR 34:050, Use of Manifest System;
3. Section 3 of 401 KAR 34:050, Manifest Discrepancies;
4. Section 4(1) and (2)(a) of 401 KAR 34:050, Operating Record;
5. Section 6 of 401 KAR 34:050, Annual Report;
6. Section 7 of 401 KAR 34:050, Unmanifested Waste Report; and
7. For NPDES or KPDES permits issued after November 8, 1984, Section 12 of 401 KAR 34:060, Corrective action.

(d) If the waste meets all federal, state, and local pretreatment requirements which would be applicable to the waste if it were being discharged into the POTW through a sewer, pipe, or similar conveyance.

(4) Elementary neutralization units. The owner or operator of an elementary neutralization unit which accepts hazardous waste for treatment, if the owner or operator complies with the national pretreatment standards (see Section 9 of 401 KAR 5:055).

(5) Wastewater treatment units. The owner or operator of a wastewater treatment unit which accepts hazardous waste for treatment, if the owner or operator:

- (a) Has a NPDES permit or a KPDES permit; and
- (b) Complies with the conditions of the permit.

## **Section 2. Emergency Permits.**

(1) Notwithstanding any other provision of this chapter, in the event the Cabinet finds an imminent and substantial endangerment to human health or the environment, the Cabinet may issue an emergency permit to allow temporary treatment, storage, or disposal of hazardous waste for a nonpermitted facility, thus, granting the nonpermitted facility an effective temporary hazardous waste site or facility permit. An emergency permit shall be granted when the Cabinet has issued an emergency order to discontinue, abate or alleviate pursuant to KRS 224.10-410, if applicable. However, an emergency permit may be issued whenever an imminent and substantial endangerment to human health and the environment exists, but the circumstances of the situation render an order for discontinuance, abatement or alleviation inappropriate.

(2) This emergency permit:

(a) May be oral or written. If oral, it shall be followed in five (5) days by a written emergency permit.

(b) Shall not exceed ninety (90) days in duration.

(c) Shall clearly specify the hazardous wastes to be received, and the manner and location of their treatment, storage, or disposal.

(d) May be terminated by the Cabinet at any time without process if the Cabinet determines that termination is appropriate to protect human health and the environment.

(e) Shall be accompanied by a public notice published under Section 7(2) of 401 KAR 38:050 including:

1. Name and address of the office granting the emergency authorization;
2. Name and location of the permitted hazardous waste site or facility;
3. A brief description of the wastes involved;
4. A brief description of the action authorized and reasons for authorizing it; and
5. Duration of the emergency permit.

(f) Shall incorporate to the extent possible and not inconsistent with the emergency situation, all applicable requirements of this chapter, and 401 KAR Chapter 34 and 401 KAR 30:030.

(g) Shall specify that all remaining hazardous waste and residues are removed at the end of the term of the emergency permit to a properly permitted hazardous waste site or facility in order to be exempted from the financial requirements of Section 1 of 401 KAR 34:080.

(h) Shall specify that failure to comply with the conditions of the emergency permit will cause the Cabinet to sue for the recovery of the cost of proper closure (see Section 2 of 401 KAR 34:070 for closure performance standards and KRS Chapter 224 for the appropriate fines and penalties).

### **Section 3. Hazardous Waste Incinerator Permits.**

(1) For the purposes of determining operational readiness following completion of physical construction, the Cabinet shall establish permit conditions, including but not limited to allowable waste feeds and operating conditions, in the permit to a new hazardous waste incinerator. These permit conditions shall be effective for the minimum time required to bring the incinerator to a point of operational readiness sufficient to conduct a trial burn, not to exceed 720 hours operating time for treatment of hazardous waste. The Cabinet may extend the duration of this operational period once, for up to 720 additional hours, at the request of the applicant when good cause is shown. The permit may be modified to reflect the extension according to Section 3 of 401 KAR 38:040 (minor modifications of permits).

(a) Applicants shall submit a statement, with Part B of the permit application, which suggests the conditions necessary to operate in compliance with the performance standards of Section 4 of 401 KAR 34:240 during this period. This statement should include, at a minimum, restrictions on waste constituents, waste feed rates and the operating parameters identified in Section 6 of 401 KAR 34:240.

(b) The Cabinet shall review this statement and any other relevant information submitted with Part B of the permit application and specify requirements for this period sufficient to meet the performance standards of Section 4 of 401 KAR 34:240 based on engineering judgment.

(2) For the purposes of determining feasibility of compliance with the performance standards of Section 4 of 401 KAR 34:240 and of determining adequate operating conditions under Section 6 of 401 KAR 34:240, the Cabinet shall establish conditions in the permit to a new hazardous waste incinerator to be effective during the trial burn.

(a) Applicants shall propose a trial burn plan, prepared in accordance with paragraph (b) of this subsection, with Part B of the permit application.

(b) The trial burn plan shall include the following information:

1. An analysis of each waste or mixture of wastes to be burned which includes:

a. Heat value of the waste in the form and composition in which it will be burned.

b. Viscosity (if applicable) or description of physical form of the waste.

c. An identification of any hazardous organic constituents listed in 401 KAR 31:170, which are present in waste to be burned, except that the applicant need not analyze for constituents listed in 401 KAR 31:170, which would reasonably not be expected to be found in the waste. The constituents excluded from analysis shall be identified and the basis for their exclusion stated. The

waste analysis shall rely on analytical techniques specified in "Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods", or other equivalent analytical techniques.

d. An approximate quantification of the hazardous constituents identified in the waste, within the precision produced by the analytical methods specified in the "Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods", or other equivalent analytical methods.

2. A detailed engineering description of the incinerator for which the trial burn permit is sought including:

- a. Manufacturer's name and model number of incinerator (if available);
- b. Type of incinerator;
- c. Linear dimensions of the incinerator unit including the cross sectional area of the combustion chamber;
- d. Description of the auxiliary fuel system (type/feed);
- e. Capacity of prime mover;
- f. Description of automatic waste feed cutoff system(s);
- g. Stack gas monitoring and pollution control equipment;
- h. Nozzle and burner design;
- i. Construction materials; and
- j. Location and description of temperature, pressure, and flow indicating and control devices.

3. A detailed description of sampling and monitoring procedures, including sampling and monitoring locations in the system, the equipment to be used, sampling and monitoring frequency, and planned analytical procedures for sample analysis.

4. A detailed test schedule for each waste for which the trial burn is planned including date(s), duration, quantity of waste to be burned, and other factors relevant to the Cabinet's decision under paragraph (e) of this subsection.

5. A detailed test protocol, including, for each waste identified, the ranges of temperature, waste feed rate, combustion gas velocity, use of auxiliary fuel, and any other relevant parameters that will be varied to affect the destruction and removal efficiency of the incinerator.

6. A description of, and planned operating conditions for, any emission control equipment which will be used.

7. Procedures for rapidly stopping waste feed, shutting down the incinerator, and controlling emissions in the event of an equipment malfunction.

8. Such other information as the Cabinet reasonably finds necessary to determine whether to approve the trial burn plan in light of the purposes of this subsection and the criteria in paragraph (e) of this subsection.

(c) The Cabinet, in reviewing the trial burn plan, shall evaluate the sufficiency of the information provided and may require the applicant to supplement this information, if necessary, to achieve the purposes of this subsection.

(d) Based on the waste analysis data in the trial burn plan, the Cabinet shall specify as trial Principal Organic Hazardous Constituents (trial POHC's), those constituents for which destruction and removal efficiencies shall be calculated during the trial burn. These trial POHC's shall be specified by the Cabinet based on the estimate of the difficulty of incineration of the constituents identified in the waste analysis, the concentration or mass in the waste feed, and, for

wastes listed in 401 KAR 31:040, the hazardous waste constituent or constituents identified in 401 KAR 31:160 as the basis for listing.

(e) The Cabinet shall approve a trial burn plan if it finds that:

1. The trial burn is likely to determine whether the incinerator performance standards required by Section 4 of 401 KAR 34:240 can be met;

2. The trial burn itself shall not present an imminent hazard to human health or the environment;

3. The trial burn shall help the Cabinet to determine operating requirements to be specified under Section 6 of 401 KAR 34:240; and

4. The information sought in paragraph (e)1 and 2 of this subsection cannot reasonably be developed through other means.

(f) The Cabinet shall send a notice to all persons on the facility mailing list and the appropriate units of state and local government as set forth in Section 7(3) of 401 KAR 38:050 announcing the scheduled commencement and completion dates for the trial burn. The applicant shall not commence the trial burn until after the Cabinet has issued such notice.

1. This notice shall be mailed within a reasonable time period before the scheduled trial burn. An additional notice is not required if the trial burn is delayed due to circumstances beyond the control of the facility or the permitting agency.

2. This notice must contain:

a. The name and telephone number of the applicant's contact person;

b. The name and telephone number of the permitting agency's contact person;

c. The location where the approved trial burn plan and any supporting documents can be reviewed and copied; and

d. An expected time period for commencement and completion of the trial burn.

(g) During each approved trial burn (or as soon after the burn as is practicable), the applicant shall make the following determinations:

1. A quantitative analysis of the trial POHC's in the waste feed to the incinerator;

2. A quantitative analysis of the exhaust gas to determine the concentration and mass emissions of the trial POHC's, oxygen (O<sub>2</sub>), and hydrogen chloride (HCl);

3. A quantitative analysis of the scrubber water (if any), ash residues, and other residues, for the purpose of estimating the fate of the trial POHC's;

4. A computation of destruction and removal efficiency (DRE), in accordance with the DRE formula specified in Section 4(1) of 401 KAR 34:240;

5. If the HCl emission rate exceeds one and eight tenths (1.8) kilograms of HCl per hour (four (4) pounds per hour), a computation of HCl removal efficiency in accordance with Section 4(2) of 401 KAR 34:240;

6. A computation of particulate emissions, in accordance with Section 4(3) of 401 KAR 34:240;

7. An identification of sources of fugitive emissions and their means of control;

8. A measurement of average, maximum, and minimum temperatures, and combustion gas velocity;

9. A continuous measurement of carbon monoxide (CO) in the exhaust gas; and

10. Such other information as the Cabinet may specify as necessary to ensure that the trial



burn will determine compliance with the performance standard in Section 4 of 401 KAR 34:240 and to establish the operating conditions required in Section 6 of 401 KAR 34:240 to meet that performance standard.

(h) The applicant shall submit to the Cabinet a certification that the trial burn has been carried out in accordance with the approved trial burn plan, and shall submit the results of all the determinations required in paragraph (f) of this subsection. This submission shall be made within ninety (90) days of the completion of the trial burn, or later if approved by the Cabinet.

(i) All data collected during any trial burn shall be submitted to the Cabinet following the completion of the trial burn. The results of the trial burn shall be included with Part B of the permit application as specified in Sections 9 and 10 of 401 KAR 38:070 and this administrative regulation, if a permit application is submitted.

(j) All submissions required by this subsection shall be certified on behalf of the applicant by the signature of a person authorized to sign a permit application or a report under Section 7 of 401 KAR 38:070.

(k) Based on the results of the trial burn, the Cabinet shall set the operating requirements in the final permit according to Section 6 of 401 KAR 34:240. The permit modification shall proceed as a minor modification according to Section 3 of 401 KAR 38:040.

(3) For the purposes of allowing operation of a new hazardous waste incinerator following completion of the trial burn and prior to final modification of the permit conditions to reflect the trial burn results, the Cabinet may establish permit conditions, including but not limited to allowable waste feeds and operating conditions, sufficient to meet the requirements of Section 6 of 401 KAR 34:240, in the permit to a new hazardous waste incinerator. These permit conditions shall be effective for the minimum time required to complete sample analysis, data computation and submission of the trial burn results by the applicant, and modification of the facility permit by the Cabinet.

(a) Applicants shall submit a statement, with Part B of the permit application, which identifies the conditions necessary to operate in compliance with the performance standards of Section 4 of 401 KAR 34:240, during this period. This statement should include, at a minimum, restrictions on waste constituents, waste feed rates and the operating parameters identified in Section 6 of 401 KAR 34:240.

(b) The Cabinet shall review this statement and any other relevant information submitted with Part B of the permit application and specify those requirements for this period most likely to meet the performance standards of Section 4 of 401 KAR 34:240, based on engineering judgment.

(4) For the purposes of determining feasibility of compliance with the performance standards of Section 4 of 401 KAR 34:240 and of determining adequate operating conditions under Section 6 of 401 KAR 34:240, the applicant for a permit for an existing hazardous waste incinerator shall prepare and submit a trial burn plan and perform a trial burn in accordance with 401 KAR 38:190, Section 2, and subsections (2)(b) to (i) of this section or, instead, submit other information as specified in Section 2(3) of 401 KAR 38:190. The Cabinet shall announce its intention to approve the trial burn plan in accordance with the timing and distribution requirements of subsection (2)(f) of this section. The contents of the notice shall include: the name and telephone number of a contact person at the facility; the name and telephone number of a contact office at the Cabinet; the location where the trial burn plan and any supporting documents can be reviewed and copied; and a schedule

of the activities that are required prior to permit issuance, including the anticipated time schedule for Cabinet approval of the plan and the time period during which the trial burn would be conducted. Applicants submitting information under Section 2(1) of 401 KAR 38:190 are exempt from compliance with Sections 4 and 6 of 401 KAR 34:240 and, therefore, are exempt from the requirement to conduct a trial burn. Applicants who submit trial burn plans and receive approval before submission of a permit application shall complete the trial burn and submit the results, specified in subsection (2)(f) of this section, with Part B of the permit application. If completion of this process conflicts with the date set for the submission of the Part B application, the applicant shall contact the Cabinet to establish a later date for submission of the Part B application or the trial burn results. Trial burn results shall be submitted prior to issuance of the permit. When the applicant submits a trial burn plan with Part B of the permit application, the Cabinet shall specify a time period prior to permit issuance in which the trial burn shall be conducted and the results submitted.

(5) In accordance with Section 3 of 401 KAR 34:080, prior to issuance of a trial burn permit, the applicant shall establish financial assurance sixty (60) days before the date on which hazardous waste is first received for treatment or storage. The amount of financial assurance established for closure shall be in accordance with the closure plan prepared pursuant to 401 KAR 34:070 and 34:240.

#### **Section 4. Permits for Land Treatment Demonstrations Using Field Tests or Laboratory Analyses.**

(1) For the purpose of allowing an owner or operator to meet the treatment demonstration requirements of Section 3 of 401 KAR 34:220, the Cabinet may issue a treatment demonstration permit. The permit shall contain only those requirements necessary to meet the standards in Section 3(3) of 401 KAR 34:220. The permit may be issued either as a treatment or disposal permit covering only the field test or laboratory analyses, or as a two (2) phase facility permit covering the field tests, or laboratory analyses, and design, construction, operation and maintenance of the land treatment unit.

(a) The Cabinet may issue a two (2) phase facility permit if it is found that information submitted in Part B of the application, substantial, although incomplete or inconclusive, information already exists upon which to base the issuance of a facility permit.

(b) If the Cabinet finds that not enough information exists upon which it can issue a permit conditions to attempt to provide for compliance with all of the requirements of 401 KAR 34:220, the Cabinet shall issue a treatment demonstration permit covering only the field test or laboratory analyses.

(2) If the Cabinet finds that a phased permit may be issued, it shall establish, as requirements in the first phase of the facility permit, conditions for conducting the field test or laboratory analyses. These permit conditions shall include design and operating parameters (including the duration of the tests or analyses and, in the case of field tests, the horizontal and vertical dimensions of the treatment zone), monitoring procedures, postdemonstration cleanup activities, and any other conditions which the Cabinet finds may be necessary under Section 3(3) of 401 KAR 34:220. The Cabinet shall include conditions in the second phase of the facility permit to attempt to meet all of 401 KAR 34:220 requirements pertaining to unit design, construction, operation, and maintenance. The Cabinet shall establish these conditions in the second phase of the

permit based upon the substantial but incomplete or inconclusive information contained in the Part B application.

(a) The first phase of the permit shall be effective as specified by the Cabinet in the permit.

(b) The second phase of the permit shall be effective as provided in subsection (4) of this section.

(3) When the owner or operator who has been issued a two (2) phase permit has completed the treatment demonstration, he shall submit to the Cabinet a certification, signed by a person authorized to sign a permit application or report under Section 7 of 401 KAR 38:070, that the field tests or laboratory analyses have been carried out in accordance with the conditions specified in the first phase of the permit for conducting such tests or analyses. The owner or operator shall also submit all data collected during the field tests or laboratory analyses within ninety (90) days of completion of those tests or analyses unless the Cabinet approves a later date.

(4) If the Cabinet determines that the results of the field tests or laboratory analyses meet the requirements of Section 3 of 401 KAR 34:220, it shall modify the second phase of the permit to incorporate any requirements necessary for operation of the facility in compliance with 401 KAR 34:220, based upon the results of the field tests or laboratory analyses.

(a) This permit modification may proceed as a minor modification under Section 3 of 401 KAR 38:040, provided any such change is minor, or otherwise shall proceed as a modification under Section 2(1)(b) of 401 KAR 38:040.

(b) If no modifications of the second phase of the permit are necessary, or if only minor modifications are necessary and have been made, the Cabinet shall give notice of the final decision to the permit applicant and to each person who submitted written comments on the phased permit or who requested notice of final decision on the second phase of the permit. The second phase of the permit then shall become effective as specified by the Cabinet in Section 12 of 401 KAR 38:050.

(c) If modifications under Section 2(1)(b) of 401 KAR 38:040 are necessary, the second phase of the permit shall become effective only after those modifications have been made.

(5) No permits shall be issued under this section unless the owner or operator has established adequate financial responsibility as specified in 401 KAR 34:080 to 34:176.

**Section 5. Interim Permits for UIC Wells.** The Cabinet may issue a permit under this section to any Class I UIC well injecting hazardous wastes within the state, if no UIC program has been approved by the EPA for Kentucky. Any such permit shall apply and insure compliance with all applicable requirements of 401 KAR Chapter 34 and 401 KAR 38:500 and shall be for a term not to exceed two (2) years. No such permit shall be issued after approval or promulgation of a UIC program in Kentucky. Any permit under this section shall contain a condition providing that it shall terminate upon final action by the Cabinet under a UIC program to issue or deny a UIC permit for the facility.

**Section 6. Research, Development, and Demonstration Permits.**

(1) The Cabinet may issue a research, development, and demonstration permit for any hazardous waste treatment facility which proposes to utilize an innovative and experimental hazardous waste treatment technology or process for which permit standards for such experimental

activity have not been promulgated under 401 KAR Chapters 34 or 36. Any such permit shall include such terms and conditions as will assure protection of human health and the environment. Such permits:

(a) Shall provide for the construction of such facilities as necessary, and for operation of the facility for not longer than one (1) year unless renewed as provided in subsection (4) of this section; and

(b) Shall provide for the receipt and treatment by the facility of only those types and quantities of hazardous waste which the Cabinet deems necessary for purposes of determining the efficacy and performance capabilities of the technology or process and the effects of such technology or process on human health and the environment; and

(c) Shall include such requirements as the Cabinet deems necessary to protect human health and the environment (including, but not limited to, requirements regarding monitoring, operation, financial responsibility, closure, and remedial action), and such requirements as the Cabinet deems necessary regarding testing and providing of information to the Cabinet with respect to the operation of the facility.

(2) For the purpose of expediting review and issuance of permits under this section, the Cabinet may, consistent with the protection of human health and the environment, modify or waive permit application and permit issuance requirements in 401 KAR Chapter 38 except that there may be no modification or waiver of provisions in KRS Chapter 224 regarding financial responsibility (including insurance) or of procedures regarding public participation.

(3) The Cabinet may order an immediate termination of all operations at the facility at any time it is determined that termination is necessary to protect human health and the environment.

(4) Any permit issued under this section may be renewed not more than three (3) times. Each such renewal shall be for a period of not more than one (1) year.

#### **Section 7. Permits for Boilers and Industrial Furnaces Burning Hazardous Waste.**

(1) General. Owners and operators of new boilers and industrial furnaces (those not operating under the interim status standards of Section 4 of 401 KAR 36:020) are subject to subsections (2) to (6) of this section. Boilers and industrial furnaces operating under the interim status standards of Section 4 of 401 KAR 36:020 are subject to subsection (7) of this section.

(2) Permit operating periods for new boilers and industrial furnaces. A permit for a new boiler or industrial furnace shall specify appropriate conditions for the following operating periods:

(a) Pretrial burn period. For the period beginning with initial introduction of hazardous waste and ending with initiation of the trial burn, and only for the minimum time required to bring the boiler or industrial furnace to a point of operational readiness to conduct a trial burn, not to exceed 720 hours operating time when burning hazardous waste, the Cabinet shall establish in the pretrial burn period of the permit conditions, including but not limited to, allowable hazardous waste feed rates and operating conditions. The Cabinet may extend the duration of this operational period once, for up to 720 additional hours, at the request of the applicant when good cause is shown. The permit may be modified to reflect the extension according to Section 3 of 401 KAR 38:040.

1. Applicants shall submit a statement, with part B of the permit application, that suggests the conditions necessary to operate in compliance with the standards of Sections 5 to 8 of

401 KAR 36:020 during this period. This statement should include, at a minimum, restrictions on the applicable operating requirements identified in Section 3(5) of 401 KAR 36:020.

2. The Cabinet shall review this statement and any other relevant information submitted with part B of the permit application and specify requirements for this period sufficient to meet the performance standards of Sections 5 to 8 of 401 KAR 36:020 based on his engineering judgment.

(b) Trial burn period. For the duration of the trial burn, the Cabinet shall establish conditions in the permit for the purposes of determining feasibility of compliance with the performance standards of Sections 5 to 8 of 401 KAR 36:020 and determining adequate operating conditions under Section 3(5) of 401 KAR 36:020. Applicants shall propose a trial burn plan, prepared under subsection (3) of this section, to be submitted with part B of the permit application.

(c) Posttrial burn period.

1. For the period immediately following completion of the trial burn, and only for the minimum period sufficient to allow sample analysis, data computation, and submission of the trial burn results by the applicant, and review of the trial burn results and modification of the facility permit by the Cabinet to reflect the trial burn results, the Cabinet shall establish the operating requirements most likely to ensure compliance with the performance standards of Sections 5 to 8 of 401 KAR 36:020 based on his engineering judgment.

2. Applicants shall submit a statement, with part B of the application, that identifies the conditions necessary to operate during this period in compliance with the performance standards of Sections 5 to 8 of 401 KAR 36:020. This statement shall include, at a minimum, restrictions on the operating requirements provided by Section 3(5) of 401 KAR 36:020.

3. The Cabinet shall review this statement and any other relevant information submitted with part B of the permit application and specify requirements for this period sufficient to meet the performance standards of Sections 5 to 8 of 401 KAR 36:020 based on his engineering judgment.

(d) Final permit period. For the final period of operation, the Cabinet shall develop operating requirements in conformance with Section 3(5) of 401 KAR 36:020 that reflect conditions in the trial burn plan and are likely to ensure compliance with the performance standards of Sections 5 to 8 of 401 KAR 36:020. Based on the trial burn results, the Cabinet shall make any necessary modifications to the operating requirements to ensure compliance with the performance standards. The permit modification shall proceed according to Section 3 of 401 KAR 38:040.

(3) Requirements for trial burn plans. The trial burn plan shall include the following information. The Cabinet, in reviewing the trial burn plan, shall evaluate the sufficiency of the information provided and may require the applicant to supplement this information, if necessary, to achieve the purposes of this subsection:

(a) An analysis of each feed stream, including hazardous waste, other fuels, and industrial furnace feedstocks, as fired, that includes:

1. Heating value, levels of antimony, arsenic, barium, beryllium, cadmium, chromium, lead, mercury, silver, thallium, total chlorine/chloride, and ash;

2. Viscosity or description of the physical form of the feed stream;

(b) An analysis of each hazardous waste, as fired, including:

1. An identification of any hazardous organic constituents listed in 401 KAR 31:170, that are present in the feed stream, except that the applicant need not analyze for constituents listed in 401 KAR 31:170, that would reasonably not be expected to be found in the hazardous waste. The

constituents excluded from analysis shall be identified and the basis for this exclusion explained. The analysis shall be conducted in accordance with analytical techniques specified in Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, EPA Publication SW-846, incorporated in 40 CFR 260.11, which is adopted in Section 3 of 401 KAR 30:010, or their equivalent.

2. An approximate quantification of the hazardous constituents identified in the hazardous waste, within the precision produced by the analytical methods specified in Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, or other equivalent.

3. A description of blending procedures, if applicable, prior to firing the hazardous waste, including a detailed analysis of the hazardous waste prior to blending, an analysis of the material with which the hazardous waste is blended, and blending ratios.

(c) A detailed engineering description of the boiler or industrial furnace, including:

1. Manufacturer's name and model number of the boiler or industrial furnace;
2. Type of boiler or industrial furnace;
3. Maximum design capacity in appropriate units;
4. Description of the feed system for the hazardous waste, and, as appropriate, other fuels and industrial furnace feedstocks;

5. Capacity of hazardous waste feed system;

6. Description of automatic hazardous waste feed cutoff system(s);

7. Description of any pollution control system; and

8. Description of stack gas monitoring and any pollution control monitoring systems.

(d) A detailed description of sampling and monitoring procedures including sampling and monitoring locations in the system, the equipment to be used, sampling and monitoring frequency, and planned analytical procedures for sample analysis.

(e) A detailed test schedule for each hazardous waste for which the trial burn is planned, including date(s), duration, quantity of hazardous waste to be burned, and other factors relevant to the Cabinet's decision under subsection (2)(b) of this section.

(f) A detailed test protocol, including, for each hazardous waste identified, the ranges of hazardous waste feed rate, and, as appropriate, the feed rates of other fuels and industrial furnace feedstocks, and any other relevant parameters that may affect the ability of the boiler or industrial furnace to meet the performance standards in Sections 5 to 8 of 401 KAR 36:020.

(g) A description of, and planned operating conditions for, any emission control equipment that will be used.

(h) Procedures for rapidly stopping the hazardous waste feed and controlling emissions in the event of an equipment malfunction.

(i) Such other information as the Cabinet reasonably finds necessary to determine whether to approve the trial burn plan in light of the purposes of this subparagraph and the criteria in subsection (2)(b) of this section.

(4) Trial burn procedures.

(a) A trial burn shall be conducted to demonstrate conformance with the standards of Sections 5 to 8 of 401 KAR 36:020 under an approved trial burn plan.

(b) The Cabinet shall approve a trial burn plan if it finds that:

1. The trial burn is likely to determine whether the boiler or industrial furnace can meet the performance standards of Sections 5 to 8 of 401 KAR 36:020;

2. The trial burn itself will not present an imminent hazard to human health and the environment;

3. The trial burn will help the Cabinet to determine operating requirements to be specified under Section 3(5) of 401 KAR 36:020; and

4. The information sought in the trial burn cannot reasonably be developed through other means.

(c) The Cabinet shall send a notice to all persons on the facility mailing list and the appropriate units of state and local governments as set forth in Section 7(3) of 401 KAR 38:050 announcing the scheduled commencement and completion dates for the trial burn. The applicant shall not commence the trial burn until after the Cabinet has issued such notice.

1. This notice shall be mailed within a reasonable time period before the trial burn. An additional notice is not required if the trial burn is delayed due to circumstances beyond the control of the facility or the Cabinet.

2. This notice shall contain:

a. The name and telephone number of the applicant's contact person;

b. The name and telephone number of the permitting agency contact person;

c. The location where the approved trial burn plan and any supporting documents can be reviewed and copied; and

d. An expected time period for commencement and completion of the trial burn.

(d) The applicant shall submit to the Cabinet a certification that the trial burn has been carried out in accordance with the approved trial burn plan, and shall submit the results of all the determinations required in subsection (3) of this section. This submission shall be made within ninety (90) days of completion of the trial burn, or later if approved by the Cabinet.

(e) All data collected during any trial burn shall be submitted to the Cabinet following completion of the trial burn.

(f) All submissions required by this subsection shall be certified on behalf of the applicant by the signature of a person authorized to sign a permit application or a report under Section 7 of 401 KAR 38:070.

(5) Special procedures for destruction and removal efficiency (DRE) trial burns. When a destruction and removal efficiency (DRE) trial burn is required under Section 5(1) of 401 KAR 36:020, the Cabinet shall specify (based on the hazardous waste analysis data and other information in the trial burn plan) as trial principal organic hazardous constituents (POHCs) those compounds for which destruction and removal efficiencies shall be calculated during the trial burn. These trial POHCs shall be specified by the Cabinet based on information including its estimate of the difficulty of destroying the constituents identified in the hazardous waste analysis, their concentrations or mass in the hazardous waste feed, and, for hazardous waste containing or derived from wastes listed in 401 KAR 31:040, the hazardous waste organic constituent(s) identified in 401 KAR 31:160 as the basis for listing.

(6) Determinations based on trial burn. During each approved trial burn (or as soon after the burn as is practicable), the applicant shall make the following determinations:

(a) A quantitative analysis of the levels of antimony, arsenic, barium, beryllium, cadmium, chromium, lead, mercury, thallium, silver, and chlorine/chloride, in the feed streams (hazardous waste, other fuels, and industrial furnace feedstocks);

- (b) When a DRE trial burn is required under Section 5(1) of 401 KAR 36:020:
1. A quantitative analysis of the trial POHCs in the hazardous waste feed;
  2. A quantitative analysis of the stack gas for the concentration and mass emissions of the trial POHCs; and
  3. A computation of destruction and removal efficiency (DRE), in accordance with the DRE formula specified in Section 5(1) of 401 KAR 36:020.
- (c) When a trial burn for chlorinated dioxins and furans is required under Section 5(5) of 401 KAR 36:020, a quantitative analysis of the stack gas for the concentration and mass emission rate of the 2,3,7,8-chlorinated tetra-octa congeners of chlorinated dibenzo-p-dioxins and furans, and a computation showing conformance with the emission standard.
- (d) When a trial burn for particulate matter, metals, or HCl/Cl<sub>2</sub> is required under Sections 6, 7(3) or (4), 8(2)(b) or (3) of 401 KAR 36:020, a quantitative analysis of the stack gas for the concentrations and mass emissions of particulate matter, metals, or hydrogen chloride (HCl) and chlorine (Cl<sub>2</sub>), and computations showing conformance with the applicable emission performance standards;
- (e) When a trial burn for DRE, metals, or HCl/Cl<sub>2</sub> is required under Sections 5(1), 7(3) or (4), or 8(2)(b) or (3) of 401 KAR 36:020, a quantitative analysis of the scrubber water (if any), ash residues, other residues, and products for the purpose of estimating the fate of the trial POHCs, metals, and chlorine/chloride;
- (f) An identification of sources of fugitive emissions and their means of control;
- (g) A continuous measurement of carbon monoxide (CO), oxygen, and where required, hydrocarbons (HC), in the stack gas; and
- (h) Such other information as the Cabinet may specify as necessary to ensure that the trial burn will determine compliance with the performance standards in Sections 5 to 8 of 401 KAR 36:020 and to establish the operating conditions required by Section 3(5) of 401 KAR 36:020 as necessary to meet those performance standards.
- (7) Interim status boilers and industrial furnaces. For the purpose of determining feasibility of compliance with the performance standards of Sections 5 to 8 of 401 KAR 36:020 and of determining adequate operating conditions under Section 4 of 36:020, applicants owning or operating existing boilers or industrial furnaces operated under the interim status standards of Section 4 of 401 KAR 36:020 shall either prepare and submit a trial burn plan and perform a trial burn in accordance with the requirements of this section or submit other information as specified in Section 1(f) of 401 KAR 38:260. The Cabinet shall announce its intention to approve of the trial burn plan in accordance with the timing and distribution requirements of subsection (4)(c) of this section. The contents of the notice shall include: the name and telephone number of a contact person at the facility; the name and telephone number of a contact person at the permitting agency; the location where the trial burn plan and any supporting documents can be reviewed and copied; and a schedule of the activities that are required prior to permit issuance, including the anticipated time schedule for Cabinet approval of the plan and the time periods during which the trial burn would be conducted. Applicants who submit a trial burn plan and receive approval before submission of the part B permit application shall complete the trial burn and submit the results specified in subsection (6) of this section with the part B permit application. If completion of this process conflicts with the date set for submission of the part B application, the applicant shall contact



the Cabinet to establish a later date for submission of the part B application or the trial burn results. If the applicant submits a trial burn plan with part B of the permit application, the trial burn shall be conducted and the results submitted within a time period prior to permit issuance to be specified by the Cabinet.

**Effective Date - March 12, 1997**

**401 KAR 38:070. Application Procedures.**

**RELATES TO:** KRS 224.01, 224.10, 224.40, 224.43, 224.46, 224.99, 15 USC 2601 et seq.

**STATUTORY AUTHORITY:** KRS 224.10-100, 224.46-520, 15 USC 2601 et seq.

**NECESSITY AND FUNCTION:** KRS 224.40-305 and 224.46-520 require any person who treats, stores, recycles or disposes of hazardous waste to first obtain a hazardous waste site or facility permit from the Cabinet. This chapter establishes the permitting process for hazardous waste sites or facilities. An overview of the permit program is found in the Necessity and Function of 401 KAR 38:010. This administrative regulation establishes the application procedures.

**Section 1. General Application Requirements.**

(1) Permit application. Any person who is required to have a permit (including new applicants and permittees with expiring permits) shall complete, sign, and submit an application to the Cabinet as described in Sections 1 through 6 of this administrative regulation and 401 KAR 38:020. Persons currently authorized with interim status under 401 KAR 38:020 shall apply for permits when required by the Cabinet. Persons covered by permits by rule, Section 1 of 401 KAR 38:060, need not apply except as required by 401 KAR 38:500 for disposal facilities permitted by rule. Procedures for applications, issuance and administration of emergency permits are found exclusively in Section 2 of 401 KAR 38:060. Procedures for application issuance and administration of research, development, and demonstration permits are found exclusively in Section 6 of 401 KAR 38:060.

(2) Applicant; who applies. When a facility or activity is owned by one (1) person but is operated by another person, it is the operator's duty to obtain a permit, and the owner shall also sign the permit application.

(3) Completeness. The Cabinet shall not issue a permit before receiving a complete application for a permit except for permits by rule or emergency permits. An application for a permit is complete when the Cabinet receives an application form and any supplemental information which are completed to the satisfaction of the Cabinet. An application for a permit is complete notwithstanding the failure of the owner or operator to submit the exposure information described in Section 9 of this administrative regulation. However, failure by the applicant to submit exposure information may be grounds for denial of the permit or revocation of an issued permit. The Cabinet may deny a permit for the active life of a hazardous waste management facility or unit before receiving a complete application for a permit.

(4) Information requirements. All applicants for permits shall provide the applicable information in compliance with 401 KAR 38:080 through 401 KAR 38:270 to the Cabinet, using the application form provided by the Cabinet.

(5) Number of copies. Any person who requires a hazardous waste site or facility permit shall submit two (2) copies of the application. If the application for a permit includes an incinerator or a facility which requires groundwater monitoring, three (3) copies of the application shall be submitted to the Cabinet. Additional copies may be required prior to permit issuance.

**Section 2. Existing Hazardous Waste Sites or Facilities and Interim Status Qualifications.**

(1) Owners or operators of existing hazardous waste sites or facilities or of hazardous waste sites or facilities in existence on the effective date of statutory or regulatory amendments that render the facility subject to the requirement to have a permit shall submit Part A of their permit application or its equivalent (Registration of Intent to Apply for a Permit) to the Cabinet no later than:

(a) Six (6) months after the date of publication of regulations which first require them to comply with the standards set forth in 401 KAR Chapters 35 or 36; or

(b) Thirty (30) days after the date they first become subject to the standards set forth in 401 KAR Chapters 35 or 36, whichever first occurs.

(2) The Cabinet may extend the date by which owners and operators of specified classes of existing hazardous waste management facilities shall submit Part A of their permit application or its equivalent if the Cabinet finds that:

(a) There has been substantial confusion as to whether the owners and operators of such facilities were required to file a permit application; and

(b) Such confusion is attributable to ambiguities in the waste management regulations.

(3) The Cabinet may by compliance order extend the date by which the owner and operator of an existing hazardous waste site or facility shall submit Part A of their permit application or its equivalent.

(4) The owner or operator of an existing hazardous waste site or facility may be required to submit Part B of the permit application. Any owner or operator shall be allowed at least six (6) months from the date of request to submit Part B of the application. Any owner or operator of an existing hazardous waste site or facility may voluntarily submit Part B of the application at any time. Notwithstanding the above, any owner or operator of an existing hazardous waste site or facility shall submit a Part B permit application in accordance with the dates specified in Section 4 of 401 KAR 38:020. Any owner or operator of a land disposal facility in existence on the effective date of statutory or regulatory amendments that render the facility subject to the requirement to have a hazardous waste site or facility permit shall submit a Part B application in accordance with the dates specified in Section 4 of 401 KAR 38:020.

(5) Failure to furnish a requested Part B application on time, or to furnish in full the information required by the Part B application, is grounds for termination of interim status under 401 KAR 38:050.

(6) Owners or operators of existing hazardous waste sites or facilities which close under interim status without submitting Part B of the permit application shall, at a minimum, comply with the corrective action requirements in Section 12 of 401 KAR 34:060.

### **Section 3. New Hazardous Waste Sites or Facilities.**

(1) Except as provided in subsection (3) of this section, no person shall begin physical construction of a new hazardous waste site or facility without having submitted Part A or its equivalent and Part B of the permit application and received an effective hazardous waste site or facility permit (see Section 12 of 401 KAR 38:050).

(2) An application for a permit for a new hazardous waste site or facility (including both Part A or its equivalent, and Part B) may be filed at any time after promulgation of the standards in 401 KAR 34:180 applicable to such facility. The application shall be filed with the Cabinet. Except as provided in subsection (3) of this section, all applications shall be submitted at least 180 days before physical construction is expected to commence.

(3) Notwithstanding subsection (1) of this section, a person may construct a facility for the incineration of polychlorinated biphenyls pursuant to an approval issued by the Administrator of the U.S. Environmental Protection Agency under Section (6)(e) of 15 USC 2601-2655 (The Toxic Substances Control Act, as amended) and any person owning or operating such a facility may, at any time after construction or operation of such facility has begun, file an application for a permit to incinerate hazardous waste authorizing such facility to incinerate waste identified or listed under KRS 224.46-510(3) and the regulations promulgated pursuant thereto.

(4) An application for a permit for a new hazardous waste disposal facility shall be in compliance with the requirements specified in KRS 224.46-520 and 401 KAR 38:500 regarding approval by the local government or the Kentucky Regional Integrated Waste Treatment and Disposal Facility Siting Board.

### **Section 4. Updating Permit Applications.**

(1) If any owner or operator of a hazardous waste site or facility has filed Part A of a permit application or its equivalent and has not yet filed Part B, the owner or operator shall file an amended Part A application or its equivalent with the Cabinet:

(a) No later than the effective date of regulatory provisions listing or designating wastes as hazardous in addition to those listed or designated previously in 401 KAR Chapter 31, if the facility is treating, storing or disposing of any of the newly listed or designated waste; or

(b) As necessary to comply with Section 3 of 401 KAR 38:020 for changes during interim status.

(2) The owner or operator of a facility who fails to comply with the updating requirements of subsection (1) of this section does not receive interim status as to the wastes not covered by a duly filed Part A application or its equivalent.

**Section 5. Reapplications.** Any hazardous waste site or facility with an effective permit shall submit a new application at least 180 days before the expiration date of the effective permit, unless permission for a later date has been granted by the Cabinet. (The Cabinet shall not grant permission for applications to be submitted later than the expiration date of the existing permit.)

**Section 6. Recordkeeping.** Applicants shall keep records of all data used to complete permit applications and any supplemental information submitted under Section 1(4) of this

administrative regulation and 401 KAR 38:080 through 38:210, for a period of at least three (3) years from the date the application is signed.

**Section 7. Signatures to Permit Applications and Reports.**

(1) Applications. All permit applications shall be signed as follows:

(a) For a corporation: by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means:

1. A president, secretary, treasurer, or vice president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision making functions for the corporation; or

2. The manager of one (1) or more manufacturing, production or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25 million (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;

(b) For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or

(c) For a municipality, state, federal, or other public agency: by either the chief executive officer or ranking elected official. For purposes of this section, a principal executive officer of a federal agency includes:

1. The chief executive officer of the agency; or

2. A senior executive officer having responsibility for the overall operation of a principal geographic unit of the agency (for example, regional administrators of EPA).

(2) Reports. All reports required by permits, and other information requested by the Cabinet, shall be signed by a person described in subsection (1) of this section, or by a duly authorized representative of that person. A person is a duly authorized representative only if:

(a) The authorization is made in writing by a person described in subsection (1) of this section;

(b) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field, superintendent, or position of equivalent responsibility (a duly authorized representative may thus be either a named individual or any individual occupying a named position); and

(c) The written authorization is submitted to the Cabinet.

(3) Changes to authorization. If an authorization under subsection (2) of this section is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of subsection (2) of this section shall be submitted to the Cabinet prior to or together with any reports, information, or applications to be signed by an authorized representative.

(4) Certification. Any person signing a document under subsections (1) or (2) of this section shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or

persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

**Section 8. Confidentiality of Information.**

(1) Claims of confidentiality. In accordance with KRS 224.10-212 (Public Information) and 400 KAR 1:060, any information submitted to the Cabinet pursuant to these regulations may be claimed as confidential by the submitter. Any such claim shall be asserted at the time of submission in the manner prescribed on the application form or instructions or, in the case of other submissions, by stamping the words "confidential business information" on each page containing such information. If no claim is made at the time of submission, the Cabinet may make the information available to the public without further notice. If a claim is asserted, the information will be treated in accordance with the procedures in KRS 224.10-212 (Public Information) and any other provision of the waste management regulations relating to confidentiality of information.

(2) Denial of claims of confidentiality. Claims that the name and address of any permit applicant or permittee is confidential will be denied.

**Section 9. Exposure Information.**

(1) After August 8, 1985, any Part B application submitted by an owner or operator of a facility that stores, treats, or disposes of hazardous waste in a surface impoundment or landfill shall be accompanied by information reasonably ascertainable by the owner or operator, on the potential for the public to be exposed to hazardous wastes or hazardous constituents through releases related to the unit. At a minimum, such information shall address:

(a) Reasonably foreseeable potential releases from both normal operations and accidents at the unit, including releases associated with transportation to or from the unit;

(b) The potential pathways of human exposure to hazardous wastes or constituents resulting from the releases described under paragraph (a) of this subsection; and

(c) The potential magnitude and nature of the human exposure resulting from such releases.

(2) By August 8, 1985, owners and operators of a landfill or a surface impoundment who have already submitted a Part B application shall submit the exposure information required in subsection (1) of this section.

(3) Information required by this section may in part satisfy the requirements of KRS 224.46-520(1) and Section 2(19) of 401 KAR 38:090.

**Section 10. Additional Information.** The Cabinet may require a permittee or an applicant to submit information in order to establish permit conditions under Section 3 of 401 KAR 38:030 and Section 5 of 401 KAR 38:040.

**Section 11. Permit Denial.** The Cabinet may, pursuant to the procedures of 401 KAR Chapter 38, deny the permit application either in its entirety or as to the active life of a hazardous waste management facility or unit only.

**Effective Date - March 12, 1997**

**401 KAR 38:080. Contents of Part A Application.**

**RELATES TO:** KRS 224.10, 224.40, 224.46, 224.99

**STATUTORY AUTHORITY:** KRS 10-100, 224.46-520

**NECESSITY AND FUNCTION:** KRS 224.40-305 and 224.46-520 require any person who treats, stores, recycles or disposes of hazardous waste to first obtain a hazardous waste site or facility permit from the Cabinet. This chapter establishes the permitting process for hazardous waste sites or facilities. An overview of the permit program is found in the Necessity and Function of 401 KAR 38:010. This administrative regulation establishes the content of the Part A application.

**Section 1. Part A Application.** Part A of the hazardous waste site or facility permit application or its equivalent (Registration of Intent to Apply for a Permit) shall be submitted on DEP Form 7058A, incorporated by reference in Section 3 of this administrative regulation and shall include the following information:

- (1) The activities conducted by the applicant which require him to obtain a hazardous waste site or facility permit under KRS Chapter 224.
- (2) Name, mailing address, and location, including latitude and longitude of the facility for which the application is submitted.
- (3) Up to four (4) SIC codes which best reflect the principal products or services provided by the facility.
- (4) The operator's name, address, telephone number, ownership status, and status as federal, state, private, public or other entity.
- (5) The name, address, and phone number of the owner of the facility.
- (6) If the U.S. government identifies any Indian lands in Kentucky, whether the facility is located on such Indian lands.
- (7) An indication of whether the facility is new or existing and whether it is a first or revised application.
- (8) For existing facilities:
  - (a) A scale drawing of the facility showing the location of all past, present, and future treatment, storage, and disposal areas; and
  - (b) Photographs of the facility clearly delineating all existing structures; existing treatment, storage, and disposal areas; and sites of future treatment, storage, and disposal areas.
- (9) A description of the process to be used for treating, storing and disposing of hazardous waste, and the design capacity of these items.
- (10) A specification of the hazardous wastes listed or designated under 401 KAR Chapter 31 to be treated, stored, or disposed at the facility, an estimate of the quantity of such wastes to be treated, stored, or disposed annually, and a general description of the processes to be used for such wastes.



(11) A listing of all permits or construction approvals received or applied for under any of the following programs:

- (a) Hazardous waste management program.
  - (b) UIC program under the SWDA.
  - (c) NPDES program under the CWA, or the KPDES program under KRS Chapter 224 and as specified in 401 KAR 5:050 through 5:085.
  - (d) Prevention of Significant Deterioration (PSD) program under KRS Chapter 224 and as specified in 401 KAR 51:017.
  - (e) Nonattainment program under KRS Chapter 224 and as specified in 401 KAR 51:052.
  - (f) National Emission Standards for Hazardous Pollutants (NESHAPS) preconstruction approval under KRS Chapter 224 and as specified in 401 KAR Chapter 57.
  - (g) Dredge or fill permits under Section 404 of the CWA.
  - (h) Other relevant environmental permits, including state permits.
- (12) A topographic map (or other map if a topographic map is unavailable) extending one (1) mile beyond the property boundaries of this source, depicting the facility and each of its intake and discharge structures; each of its hazardous waste treatment, storage, or disposal facilities; each well where fluids from the facility are injected underground; and those wells, springs, other surface water bodies, and drinking water wells listed in public records or otherwise known to be applicant within one-quarter (1/4) mile of the facility property boundary.
- (13) A brief description of the nature of the business.
- (14) For hazardous debris, a description of the debris category and containment category to be treated, stored, or disposed at the facility.

**Section 2. Revised Part A Applications.** If any of the information required by Section 1, subsections (1), (2), (4), (5), (9), and (10) of this administrative regulation changes, the owner or operator shall submit a revised Part A application to the Cabinet within 60 days of the change. The changes shall be submitted on DEP Form 7058A, incorporated by reference in Section 3 of this administrative regulation.

**Section 3. Incorporation by Reference.** The Part A of the Kentucky Hazardous Waste Permit Application, DEP Form 7058A (June 1995), is hereby incorporated by reference in this administrative regulation. This form may be obtained from the Hazardous Waste Branch, Division of Waste Management, 14 Reilly Road, Frankfort, Kentucky, 40601, between the hours of 8 a.m. and 4:30 p.m., Monday through Friday. Call (502) 564-6716 for assistance.

**Effective Date - March 12, 1997**

**401 KAR 38:090. General Contents of Part B Application.**

**RELATES TO:** KRS 224.10, 224.40, 224.46, 224.99, 40 CFR 270.14

**STATUTORY AUTHORITY:** KRS 10-100, 224.46-520, 224.46-530

**NECESSITY AND FUNCTION:** To implement provisions of KRS 224.46-520 and 224.46-530, and to establish the general contents of the Part B application.

**Section 1. Contents of Part B Application.** Part B of the permit application consists of the general information requirements of this administrative regulation and the specific informational requirements in 401 KAR 38:100 to 38:210 applicable to the facility. The Part B information requirements presented in this administrative regulation and 401 KAR 38:100 to 401 KAR 38:210 reflect the information requirements necessary for the Cabinet to determine compliance with 401 KAR Chapter 34 standards. If owners and operators of hazardous waste sites or facilities can demonstrate that the information prescribed in Part B cannot be provided to the extent required, the Cabinet may make allowance for submission of such information on a case-by-case basis. Information required in Part B shall be submitted to the Cabinet and signed in accordance with requirements in Section 7 of 401 KAR 38:070. Certain technical data, such as design drawings and specifications, and engineering studies shall be certified by an engineer.

**Section 2. General Information Requirements.** The following information is required for all hazardous waste sites or facilities, except as Section 1 of 401 KAR 34:010 provides otherwise:

- (1) A general description of the facility.
- (2) Chemical and physical analyses of the hazardous wastes and hazardous debris to be handled at the facility. At a minimum, these analyses shall contain all the information which must be known to treat, store, or dispose of the wastes properly in accordance with 401 KAR Chapter 34.
- (3) A copy of the waste analysis plan required by Section 4(2) of 401 KAR 34:020 and, if applicable, Section 4(3) of 401 KAR 34:020.
- (4) A description of the security procedures and equipment required by Section 5 of 401 KAR 34:020, or a justification demonstrating the reasons for requesting a variance of this requirement.
- (5) A copy of the general inspection schedule required by Section 6(2) of 401 KAR 34:020. Include, where applicable, as part of the inspection schedule, specific requirements in Section 5 of 401 KAR 34:180, Sections 4(9) and 6 of 401 KAR 34:190, Section 4 of 401 KAR 34:200, Section 5 of 401 KAR 34:210, Section 4 of 401 KAR 34:220, Section 4 of 401 KAR 34:230, Section 7 of 401 KAR 34:240, Section 2 of 401 KAR 34:245, Section 3 of 401 KAR 34:250, Section 4 of 401 KAR 34:275, Sections 3, 4, and 9 of 401 KAR 34:280, Section 8 and 11 of 401 KAR 34:281, and Section 5 of 401 KAR 34:285.

(6) A justification of any request for a variance of the preparedness and prevention requirements of 401 KAR 34:030.

(7) A copy of the contingency plan required by 401 KAR 34:030; include, where applicable, as part of the contingency plan, specific requirements in 401 KAR 34:190, 34:200 and 34:210.

(8) A description of procedures, structures, or equipment used at the facility to:

- (a) Prevent hazards in unloading operations (for example, ramps, special fork lifts);
- (b) Prevent run-off from hazardous waste handling areas to other areas of the facility or environment, or to prevent flooding (for example, berms, dikes, trenches);
- (c) Prevent contamination of water supplies;
- (d) Mitigate effects of equipment failure and power outages;
- (e) Prevent undue exposure of personnel to hazardous waste (for example, protective clothing); and
- (f) Prevent releases to atmosphere.

(9) A description of precautions to prevent accidental ignition or reaction of ignitable, reactive or incompatible wastes as required to demonstrate compliance with Section 8 of 401 KAR 34:020 including documentation demonstrating compliance with Section 8(3) of 401 KAR 34:020.

(10) Traffic pattern, estimated volume (number, types of vehicles) and control (for example, show turns across traffic lanes, and stacking lanes, if appropriate; describe access road surfacing and load bearing capacity; show traffic control signals).

(11) Facility location information:

(a) In order to determine the applicability of the seismic standard, Section 9(1) of 401 KAR 34:020, the owner or operator of a new facility shall identify the political jurisdiction (county, township, or election district) in which the facility is proposed to be located.

(b) If the facility is proposed to be located in an area listed in 401 KAR 34:340 the owner or operator shall demonstrate compliance with the seismic standard. This demonstration may be made using either published geologic data or data obtained from field investigations carried out by the applicant. The information provided shall be of such quality to be acceptable to geologists experienced in identifying and evaluation seismic activity. The information submitted shall show that either:

1. No faults which have had displacement in Holocene time are present, or no lineations which suggest the presence of a fault (which have had displacement in Holocene time) within 3,000 feet of a facility are present, based on data from:

- a. Published geologic studies;
- b. Aerial reconnaissance of the area within a five (5) mile radius from the facility;
- c. An analysis of aerial photographs covering a 3,000 foot radius of the facility; and
- d. If needed to clarify the above data, a reconnaissance based on walking portions of the area within 3,000 feet of the facility; or

2. If faults (to include lineations) which have had displacement in Holocene time are present within 3,000 feet of a facility, no faults pass within 200 feet of the portions of the facility where treatment, storage, or disposal of hazardous waste will be conducted, based on data from a comprehensive geologic analysis of the site. Unless a site analysis is otherwise conclusive concerning the absence of faults within 200 feet of such portions of the facility, data shall be

obtained from a subsurface exploration (trenching) of the area within a distance no less than 200 feet from portions of the facility where treatment, storage or disposal of hazardous waste will be conducted. Such trenching shall be performed in a direction that is perpendicular to known faults (which have had displacement in Holocene time) passing within 3,000 feet of the portions of the facility where treatment, storage, or disposal of hazardous waste shall be conducted. Such investigation shall document with supporting maps and other analyses the location of any faults found.

(c) Owners and operators of all facilities shall provide an identification of whether the facility is located within a 100-year flood plain, floodway or seasonal high water tables in accordance with Section 9(2) of 401 KAR 34:020. This identification shall indicate the source of data for such determination and include a copy of the relevant Federal Insurance Administration (FIA) flood map, if used, or the calculations and maps used where a FIA map is not available. Information shall also be provided identifying the 100-year flood level and any other special flooding factors (wave action for example) which will be considered in designing, constructing, operating, or maintaining the facility to withstand washout from a 100-year flood. Note: Where maps for the National Flood Insurance Program produced by the Federal Insurance Administration (FIA) of the Federal Emergency Management Agency are available, they shall normally be determinative of whether a facility is located within or outside of the 100-year flood plain. However, where the FIA map excludes an area (usually areas of the flood plain less than 200 feet in width), these areas shall be considered and a determination made as to whether they are in the 100-year flood plain. Where FIA maps are not available for a proposed facility location, the owner or operator shall use equivalent mapping techniques to determine whether the facility is within the 100-year flood plain, and if so located, what the 100-year flood elevation would be.

(d) Owners and operators of facilities located in the 100-year flood plain shall provide the following information:

1. Engineering analysis to indicate the various hydrodynamic and hydrostatic forces expected to result at the site as a consequence of a 100-year flood;
2. Structural or other engineering studies showing the design of operational units (for example, tanks, incinerators) and flood prevention devices (for example, floodwalls, dikes) at the facility and how these will prevent washout and inundation of the waste;
3. If applicable, and in lieu of subparagraphs 1 and 2 of this paragraph a detailed description of procedures to be followed to remove hazardous waste to safety before the facility is flooded, including:
  - a. Timing of such movement relative to flood levels, including estimated time to move the waste, to show that such movement can be completed before floodwaters reach the facility;
  - b. A description of the location(s) to which the waste will be moved and demonstration that those facilities will be eligible to receive hazardous waste in accordance with the administrative regulations under 401 KAR Chapters 34 to 38;
  - c. The planned procedures, equipment, and personnel to be used and the means to ensure that such resources will be available in time for use; and
  - d. The potential for accidental discharges of the waste during movement.

(e) Existing facilities NOT in compliance with Section 9(2) of 401 KAR 34:020 shall provide a plan showing how the facility will be brought into compliance and a schedule for compliance.

(12) An outline of both the introductory and continuing training programs by owners or operators to prepare persons to operate or maintain the hazardous waste site or facility in a safe manner as required to demonstrate compliance with Section 7 of 401 KAR 34:020. A brief description of how training will be designed to meet actual job tasks in accordance with requirements in Section 7(1)(c) of 401 KAR 34:020.

(13) A copy of the closure plan and, where applicable, the postclosure plan required by Sections 3 and 9 of 401 KAR 34:070, and Section 8 of 401 KAR 34:190. Include, where applicable, as part of the plans, specific requirements in Section 9 of 401 KAR 34:180, Section 8 of 401 KAR 34:190, Section 6 of 401 KAR 34:200, Section 8 of 401 KAR 34:210, Section 8 of 401 KAR 34:220, Section 6 of 401 KAR 34:230, Section 8 of 401 KAR 34:240, Section 3 of 401 KAR 34:245, Sections 2 and 4 of 401 KAR 34:250, and Section 6 of 401 KAR 34:285.

(14) For hazardous waste disposal units that have been closed, documentation that notices required under Section 10 of 401 KAR 34:070 have been filed.

(15) The most recent closure cost estimate for the facility prepared in accordance with Section 1 of 401 KAR 34:090 and a copy of the documentation required to demonstrate financial assurance under Sections 2 to 12 of 401 KAR 34:090. For a new facility, the required documentation may be submitted sixty (60) days prior to the initial receipt of hazardous wastes, if that is later than the submission of the Part B.

(16) Where applicable, the most recent postclosure cost estimate for the facility prepared in accordance with Section 1 of 401 KAR 34:100 plus a copy of the documentation required to demonstrate financial assurance under Sections 2 to 12 of 401 KAR 34:100. For a new facility, a copy of the required documentation may be submitted sixty (60) days prior to the receipt of hazardous wastes, if that is later than the submission of the Part B.

(17) Where applicable, a copy of the insurance policy or other documentation which comprises compliance with the requirements of 401 KAR 34:120. For a new facility, documentation showing the amount of insurance meeting the specification of Section 1 of 401 KAR 34:120 and if applicable, Section 2 of 401 KAR 34:120 that the owner or operator plans to have in effect before initial receipt of hazardous waste for the treatment, storage, or disposal. A request for a variance in the amount of required coverage, for a new or existing facility, may be submitted as specified in 401 KAR 34:120.

(18) A topographic map showing a distance of 1000 feet around the facility at a scale of 2.5 centimeters (approximately one (1) inch) equal to not more than 61.0 meters (approximately 200 feet). Contours shall be shown on the map. The contour interval shall be sufficient to clearly show the pattern of surface water flow in the vicinity of and from each operational unit of the facility. For example, contours with an interval of 1.5 meters (approximately five (5) feet), if relief is greater than 6.1 meters (approximately twenty (20) feet), or an interval of 0.6 meters (approximately two (2) feet), if relief is less than 6.1 meters (approximately twenty (20) feet). Owners and operators of hazardous waste sites or facilities located in mountainous areas shall use larger contour intervals to adequately show topographic profiles of facilities. The map shall clearly show the following:

(a) Map scale and date;

(b) 100 year flood plain area and, if applicable, floodway and areas of seasonal high water table;

(c) Surface waters including intermittent streams;

(d) Surrounding land uses (residential, commercial, agricultural, recreational);

(e) A wind rose (that is, prevailing wind-spread and direction);

(f) Orientation of the map (north arrow);

(g) Legal boundaries of the hazardous waste site or facility;

(h) Access control (fences, gates);

(i) Injection and withdrawal wells both on-site and off-site;

(j) Buildings; treatment, storage, or disposal operations; or other structures (recreation areas, run-off control systems, groundwater monitoring systems, access and internal roads, storm, sanitary, and process sewerage systems, loading and unloading areas, and fire control facilities for example);

(k) Barriers for drainage or flood control; and

(l) Location of operational units within the hazardous waste site or facility where hazardous waste is (or will be) treated, stored, or disposed (including equipment cleanup areas).

(19) In addition to information required by the Cabinet pursuant to this section, all applicants for construction permits shall submit to the Cabinet a plan in accordance with KRS 224.46-520(1). The plan shall address each of the following issues specifically, shall document the applicant's decisions with respect to the proposal, shall make reasonable justification for actions taken and demonstrate that the proposed facility can be integrated into the surroundings in an environmentally compatible manner, including but not limited to insuring that hydrologic, seismologic, geologic and soil considerations have been adequately addressed in the application and operational plan. The plan shall include:

(a) An evaluation of alternatives including other site locations and treatment, storage and disposal approaches (see KRS 224.46-520(1)(a));

(b) An evaluation of the public health, safety and environmental aspects on the affected community (see KRS 224.46-520(1)(b));

(c) An evaluation of the social and economic impacts of the proposal on the affected community (see KRS 224.46-520(1)(c));

(d) An evaluation of mitigation procedures to alleviate problems identified in paragraphs (a), (b), and (c) of this subsection (see KRS 224.46-520(1)(d)); and

(e) An evaluation of the relationship of the proposal to local planning and existing development (see KRS 224.46-520(1)(e)).

(f) In the case of hazardous waste landfills or other sites or facilities for the land disposal of hazardous waste the provisions of paragraphs (c) and (e) of this subsection shall be determined by the local unit of government pursuant to KRS 224.40-310(5); in the case of a regional integrated waste treatment and disposal demonstration facility the provisions of paragraphs (c) and (e) of this subsection shall be determined by the siting board established pursuant to KRS 224.46-820.

(20) A showing of the past compliance record for both the applicant and any other individual or entity designated to own or operate the hazardous waste site or facility (as required by KRS 224.46-520(1)) as follows:

(a) Organizational structure:

1. If the applicant is a proprietorship, a detailed listing of:
  - a. The proprietors and their respective interests, whether ownership or otherwise.
  - b. Any partnership (general or limited), joint venture, or corporation in which the applicant holds as much as or more than a twenty-five (25) percent interest (whether ownership or otherwise).
2. If the applicant is a partnership, either general or limited, a detailed listing of:
  - a. Each of the partners and their respective interests, whether ownership or otherwise.
  - b. Any corporation, joint venture, partnership (general or limited), or proprietorship in which any of the constituent partners of the applicant holds as much as or more than twenty-five (25) percent interest (whether ownership or otherwise);
  - c. Any corporation, joint venture, proprietorship, or partnership (general or limited) which holds as much as or more than a twenty-five (25) percent interest (whether ownership or otherwise) in any of the nonindividual constituent partners comprising the applicant.
3. If the applicant is a corporation, a detailed listing of:
  - a. The officers, directors, and major stockholders;
  - b. Any corporation of which the applicant is either a subsidiary or which holds as much as or more than a twenty-five (25) percent interest (either in stock or assets) in the applicant;
  - c. Any corporations which are either subsidiaries of the applicant or in which the applicant holds as much as or more than a twenty-five (25) percent interest (either in stock or assets);
  - d. Any proprietorship, partnership (general or limited), or joint venture in which the applicant holds as much as or more than a twenty-five (25) percent interest, whether ownership or otherwise.
4. If the applicant is a joint venture, a detailed listing of:
  - a. All other joint venturers, and the respective interests (whether ownership or otherwise) of each;
  - b. Any proprietorship, partnership (general or limited), joint venture or corporation in which the applicant holds as much as or more than a twenty-five (25) percent interest (whether ownership or otherwise).

(b) For the purposes of paragraph (c) of this subsection, the listing of violations of laws, rules or administrative regulations shall include the following areas:

1. Solid or hazardous waste management;
2. Air pollution;
3. Water;
4. OSHA with respect to hazardous materials or hazardous substances; and
5. Transportation with respect to hazardous materials or hazardous substances.

(c) For each and every individual or other entity listed in paragraph (a) of this subsection, a detailed listing of all violations of federal or state laws, rules or administrative regulations concerning the areas listed in paragraph (b) of this subsection (whether either judicial or

administrative proceedings are pending or completed) that have resulted or could result in either criminal convictions or civil or administrative fines as much as or more than \$1,000.

(d) For each and every individual or other entity listed in paragraph (a) of this subsection, a current financial statement prepared by a certified public accountant.

(e) Hazardous waste sites or facilities which have been regulated under interim status shall be exempt from the requirements of this subsection unless the Cabinet specifies otherwise in writing.

(21) An evaluation of subsurface geologic formations and surface topography for solution or karst features. The owner or operator shall demonstrate compliance with either paragraph (a) or (b) of this subsection.

(a) If the owner or operator demonstrates to the satisfaction of the Cabinet that the facility is not underlain by soluble limestone, he is exempt from all of the requirements of this subsection.

(b) If the owner or operator does not make the demonstration of paragraph (a) of this subsection, the owner or operator shall satisfy the requirements in paragraph (c)1 or (c)2 of this subsection. In addition, the owner or operator shall demonstrate that:

1. The facility has been designed to withstand any gradual or sudden land subsidence which is characteristic of areas underlain by soluble limestone; and

2. No contamination into or through any fractures, channels or solution features shall occur.

(c) Except as provided in paragraph (a) of this subsection, the owner or operator shall comply with either subparagraph 1 or 2 of this paragraph.

1. The owner or operator shall:

a. Establish the presence and extent of all fractures, channels and solution features in the bedrock beneath the facility and describe how such features will be sealed, filled, isolated or otherwise neutralized to prevent subsidence; and

b. Describe how such solution features will be monitored to demonstrate compliance with the criteria of paragraph (b)1 and 2 of this subsection; or

2. The owner or operator shall design, operate and maintain a double-liner system which shall be installed beneath the facility and which includes a leak detection system that meets the criteria of paragraph (b)1 and 2 of this subsection. The design of the double-lined facility shall meet all the specifications of Section 3 of 401 KAR 34:200 (surface impoundments), Section 3 of 401 KAR 34:210 (waste piles) and Section 3 of 401 KAR 34:230 (landfills), as applicable.

(22) The actual test data showing that the liner is or will be compatible with the waste, if applicable.

(23) For land disposal facilities, if a case-by-case extension has been approved under Section 5 of 401 KAR 37:010 or a petition has been approved under Section 6 of 401 KAR 37:010, a copy of the notice of approval for the extension or petition is required.

(24) The documentation on waste minimization required by Section 1(12)(h)4 of 401 KAR 38:030.

(25) Demonstration of financial assurance as required by KRS 224.40-325.



(26) A summary of the pre-application meeting, along with a list of attendees and their addresses, and copies of any written comments or materials submitted at the meeting, as required under Section 14(3) of 401 KAR 38:050.

(27) Applicants may be required to submit such information as may be necessary to enable the Cabinet to carry out its duties under state laws as required in this chapter.

Effective Date - March 12, 1997

**401 KAR 38:100. Specific Part B Requirements for Ground Water Protection.**

**RELATES TO:** KRS 224.10, 224.40, 224.46, 224.99

**STATUTORY AUTHORITY:** KRS 224.40-305, 224.46-520

**NECESSITY AND FUNCTION:** KRS 224.40-302 and 224.46-520 require any person who treats, stores, recycles, or disposes of hazardous waste to first obtain a hazardous waste site or facility permit from the Cabinet. This chapter establishes the permitting process for hazardous waste sites or facilities. An overview of the permit program is found in the Necessity and Function of 401 KAR 38:010. This administrative regulation establishes the additional Part B requirements necessary for the protection of ground water.

**Section 1. Applicability.** This administrative regulation applies to all owners or operators of hazardous waste surface impoundments, piles, land treatment units, and landfills except as otherwise provided in Section 1(2) of 401 KAR 34:060.

**Section 2. Additional Information Requirements.** In addition to the information required by 401 KAR 38:080, 38:090, and the applicable requirements of 401 KAR 38:150 through 401 KAR 38:210, the following additional information regarding protection of ground water is required from owners or operators of hazardous waste facilities containing a regulated unit except as otherwise provided in Section 1(2) of 401 KAR 34:060.

(1) A summary of the ground water monitoring data obtained during the interim status period under 401 KAR 35:060, where applicable.

(2) Identification of the uppermost aquifer and aquifers hydraulically interconnected beneath the facility property, including ground water flow direction and rate, and the basis for such identification (i.e., the information obtained from hydrogeologic investigations of the facility area).

(3) On the topographic map required under Section 2(18) of 401 KAR 38:090, a delineation of the waste management area, the property boundary, the proposed "point of compliance" as identified under Section 6 of 401 KAR 34:060, the proposed location of ground water monitoring wells, as required under Section 8 of 401 KAR 34:060, and to the extent possible, the information required in subsection (2) of this section.

(4) A description of any plume of contamination that has entered the ground water from a regulated unit at the time that the application is submitted that:

(a) Delineates the extent of the plume on the topographic map required under Section 2(18) of 401 KAR 38:090; and

(b) Identifies the concentration of each constituent from 401 KAR 34:360 throughout the plume or identifies the maximum concentrations of each constituent from 401 KAR 34:360 in the plume.

(5) Detailed plans and an engineering report describing the proposed ground water monitoring program to be implemented to meet the requirements of Section 8 of 401 KAR 34:060.

(6) If the presence of hazardous constituents has not been detected in the ground water at the time of permit application, the owner or operator shall submit sufficient information, supporting data and analyses to establish a detection monitoring program which meets the requirements of Section 9 of 401 KAR 34:060. This submission shall address the following items as specified under Section 9 of 401 KAR 34:060:

(a) A proposed list of indicator parameters, waste constituents, or reaction products that can provide a reliable indication of the presence of hazardous constituents in the ground water;

(b) A proposed ground water monitoring system;

(c) Background values for each proposed monitoring parameter or constituent, or procedures to calculate such values; and

(d) A description of proposed sampling, analysis and statistical comparison procedures to be utilized in evaluating ground water monitoring data.

(7) If the presence of hazardous constituents has been detected in the ground water at the point of compliance at the time of permit application, the owner or operator shall submit sufficient information, supporting data, and analyses to establish a compliance monitoring program which meets the requirements of Section 10 of 401 KAR 34:060. The owner or operator shall also submit an engineering feasibility plan for a corrective action program necessary to meet the requirements of Section 11 of 401 KAR 34:060, except as provided in Section 9(8)(e) of 401 KAR 34:060, unless the owner or operator obtains written authorization in advance from the Cabinet to submit a proposed permit schedule for submittal of such a plan. To demonstrate compliance with Section 10 of 401 KAR 34:060, the owner or operator shall address the following items:

(a) A description of the wastes previously handled at the facility;

(b) A characterization of the contaminated ground water, including concentrations of hazardous constituents;

(c) A list of hazardous constituents for which compliance monitoring shall be undertaken in accordance with Sections 8 and 10 of 401 KAR 34:060;

(d) Proposed concentration limits for each hazardous constituent, based on the criteria set forth in Section 5 of 401 KAR 34:060;

(e) Detailed plans and an engineering report describing the proposed ground water monitoring system, in accordance with the requirements of Section 8 of 401 KAR 34:060; and

(f) A description of proposed sampling, analysis, and statistical comparison procedures to be utilized in evaluating ground water monitoring data.

(8) If hazardous constituents have been measured in the ground water which exceed the concentration limits established under Section 5 of 401 KAR 34:060, or if ground water monitoring conducted at the time of permit application under 401 KAR 35:060 at the waste boundary indicates the presence of hazardous constituents from the facility in the ground water over established background concentrations, the owner or operator shall submit sufficient information, supporting data, and analyses to establish a corrective action program which meets the requirements of Section 11 of 401 KAR 34:060. To demonstrate compliance with Section 11 of 401 KAR 34:060, the owner or operator shall address, at a minimum, the following items:

- (a) A characterization of the contaminated ground water, including concentrations of hazardous constituents;
- (b) The concentration limit for each hazardous constituent found in the ground water as set forth in Section 4 of 401 KAR 34:060;
- (c) Detailed plans and an engineering report describing the corrective action to be taken; and
- (d) A description of how the ground water monitoring program shall demonstrate the adequacy of the corrective action.
- (e) The permit may contain a schedule for submittal of the information required in paragraphs (c) and (d) of this subsection provided the owner or operator obtains written authorization from the Cabinet prior to submittal of the complete permit application.

**Section 3. Information Requirements for Solid Waste Management Units.**

- (1) The following information is required for each solid waste management unit at a facility seeking a permit:
  - (a) The location of the unit on the topographic map required under 401 KAR 38:090, Section 2.
  - (b) Designation of type of unit.
  - (c) General dimensions and structural description (supply any available drawings).
  - (d) When the unit was operated.
  - (e) Specification of all wastes that have been managed at the unit, to the extent available.
- (2) The owner or operator of any facility containing one (1) or more solid waste management units shall submit all available information pertaining to any release of hazardous wastes or hazardous constituents from such unit or units.
- (3) The owner or operator shall conduct and provide the results of sampling and analysis of groundwater, land-surface, and subsurface strata, surface water, or air, which may include the installation of wells, where the secretary ascertains it is necessary to complete a RCRA facility assessment that shall determine if a more complete investigation is necessary.

**Effective Date - March 12, 1997**

**401 KAR 38:150. Specific Part B Requirements for Containers.**

**RELATES TO:** KRS 224.10, 224.40, 224.46, 224.99

**STATUTORY AUTHORITY:** KRS 224.10-100, 224.46-520

**NECESSITY AND FUNCTION:** KRS 224.40-305 and 224.46-520 require any person who treats, stores, recycles or disposes of hazardous waste to first obtain a hazardous waste site or facility permit from the Cabinet. This chapter establishes the permitting process for hazardous waste sites or facilities. An overview of the permit program is found in the Necessity and Function of 401 KAR 38:010. This administrative regulation establishes specific Part B requirements for facilities that manage hazardous waste in containers.

**Section 1. Applicability.** The requirements in this administrative regulation apply to all owners and operators of hazardous waste sites or facilities that store or will store hazardous waste in containers.

**Section 2. Additional Part B Requirements for Containers.** In addition to the information required by 401 KAR 38:080, 401 KAR 38:090, and 401 KAR 38:100, owners and operators of facilities that store or will store containers of hazardous waste, except as otherwise provided in Section 1 of 401 KAR 34:010 and in 401 KAR 34:180, must provide the following additional information:

- (1) A description of the containment system to demonstrate compliance with Section 6 of 401 KAR 34:180. The description must show at least the following:
  - (a) Basic design parameters, dimensions, and materials of construction;
  - (b) How the design promotes drainage or how containers are kept from contact with standing liquids in the containment system;
  - (c) Capacity of the containment system relative to the number and volume of containers to be stored;
  - (d) Provisions for preventing or managing run-on; and
  - (e) How accumulated liquids can be analyzed and removed to prevent overflow.
- (2) For storage areas that store containers holding wastes that do not contain free liquids, a demonstration of compliance with Section 6 of 401 KAR 34:180, including:
  - (a) Test procedures and results or other documentation or information to show that the wastes do not contain free liquids; and
  - (b) A description of how the storage area is designed or operated to drain and remove liquids or how containers are kept from contact with standing liquids.
- (3) Sketches, drawings, or data demonstrating compliance with Section 7 of 401 KAR 34:180 (location of buffer zone and containers holding ignitable or reactive wastes), and Section 8 of 401 KAR 34:180 (location of incompatible wastes), where applicable.

(4) Where incompatible wastes are stored or otherwise managed in containers, a description of the procedures used to ensure compliance with Section 8(1) and (2) of 401 KAR 34:180, and Section 8(2) and (3) of 401 KAR 34:020.

(5) Information on air emission control equipment as required in Section 3 of this administrative regulation.

**Section 3. Specific Part B Information Requirements for Air Emission Controls for Containers.** Except as otherwise provided in Section 1 of 401 KAR 34:010, owners or operators of containers that use air emission controls in accordance with the requirements of 401 KAR 34:281 shall provide the following additional information:

(1) Identification of each container area subject to the requirements of 401 KAR 34:281 and certification by the owner or operator that the requirements of 401 KAR 38:070 through 38:270 are met.

(2) Documentation for each enclosure used to control air emissions from containers in accordance with the requirements of Section 6(2)(b)1. of 401 KAR 34:281 that includes information prepared by the owner or operator or provided by the manufacturer or vendor describing the enclosure design, and certification by the owner or operator that the enclosure meets the specifications listed in Section 7(2)(b) of 401 KAR 35:281.

(3) Documentation for each closed-vent system and control device installed in accordance with the requirements of Section 7 of 401 KAR 34:281 that includes design and performance information as specified in Section 1(3) and (4) of 401 KAR 38:240.

(4) An emission monitoring plan for both 40 CFR Part 60 Appendix A Method 21 and control device monitoring methods. This plan shall include the following information: monitoring point(s), monitoring methods for control devices, monitoring frequency, procedures for documenting exceedances, and procedures for mitigating noncompliances.

(5) When an owner or operator of a facility subject to 401 KAR 35:281 cannot comply with 401 KAR 34:281 by the date of permit issuance, the schedule of implementation required under Section 2 of 401 KAR 35:281.

**Effective Date - March 12, 1997**

**401 KAR 38:160. Specific Part B Information Requirements for Tanks.**

**RELATES TO:** KRS 224.10, 224.46, 224.99

**STATUTORY AUTHORITY:** KRS 224.10-100, 224.46-520, 224.46-530

**NECESSITY AND FUNCTION:** KRS 224.40-305 and 224.46-520 require any person who treats, stores, recycles, or disposes of hazardous waste to first obtain a hazardous waste site or facility permit from the Cabinet. This chapter establishes the permitting process for hazardous waste sites or facilities. An overview of the permit program is found in the Necessity and Function of 401 KAR 38:010. This administrative regulation establishes specific Part B requirements for facilities that treat or store hazardous waste in tanks.

**Section 1. Applicability.** The requirements in this administrative regulation apply to all owners or operators of hazardous waste sites or facilities that treat or store or will treat or store hazardous waste in tanks.

**Section 2. Specific Part B Information Requirements for Tank Systems.** Except as otherwise provided in Section 1 of 401 KAR 34:010 and Section 1 of 401 KAR 34:190, owners and operators of facilities that use or will use tanks to store or treat hazardous waste must provide the following information in addition to the information required by 401 KAR 38:080, 401 KAR 38:090, and 401 KAR 38:100:

- (1) A written assessment that is reviewed and certified by an independent, qualified, professional engineer registered in the state of Kentucky as to the structural integrity and suitability for handling hazardous waste of each tank system, as required under Sections 2 and 3 of 401 KAR 34:190;
- (2) Dimensions and capacity of each tank;
- (3) A description of feed systems, safety cutoff, bypass systems, and pressure controls (e.g., vents);
- (4) A diagram of piping, instrumentation, and process flow for each tank system;
- (5) A description of materials and equipment used to provide external corrosion protection, as required under Section 3(1)(c)2 of 401 KAR 34:190;
- (6) For new tank systems, a detailed description of how the tank system(s) will be installed in compliance with Section 3(2) through (5) of 401 KAR 34:190;
- (7) Detailed plans and description of how the secondary containment system for each tank system is or will be designed, constructed, and operated to meet the requirements of Section 4(1) through (6) of 401 KAR 34:190;
- (8) For tank systems for which a variance from the requirements of Section 4 of 401 KAR 34:190 is sought (as provided by Section 4(7) of 401 KAR 34:190):
  - (a) Detailed plans and engineering and hydrogeologic reports, as appropriate, describing alternate design and operating practices that will, in conjunction with location aspects, prevent the

migration of any hazardous waste or hazardous constituents into the groundwater or surface water during the life of the facility; or

(b) A detailed assessment of the substantial present or potential hazards posed to human health or the environment should a release enter the environment;

(9) Description of controls and practices to prevent spills and overflows, as required under Section 5(2) of 401 KAR 34:190; and

(10) For tank systems in which ignitable, reactive, or incompatible wastes are to be stored or treated, a description of how operating procedures and tank system and facility design will achieve compliance with the requirements of Sections 9 and 10 of 401 KAR 34:190.

(11) Information on air emission control equipment as required in Section 3 of this administrative regulation.

**Section 3. Specific Part B Information Requirements for Air Emission Controls for Tanks.**

Except as otherwise provided in Section 1 of 401 KAR 34:010, owners or operators of tanks that use air emission controls in accordance with the requirements of 401 KAR 34:281 shall provide the following additional information:

(1) Documentation for each cover installed on a tank subject to Section 4(2)(b) or 4(2)(c) of 401 KAR 34:281 that includes information prepared by the owner or operator or provided by the cover manufacturer or vendor describing the cover design, and certification by the owner or operator that the cover meets the applicable design specifications as listed in Section 11(3) of 401 KAR 34:281.

(2) Documentation for each closed-vent system and control device installed in accordance with the requirements of Section 7 of 401 KAR 34:281 that includes design and performance information as specified in Section 1(3) and (4) of 401 KAR 38:240.

(3) An emission monitoring plan for both 40 CFR Part 260 Appendix A Method 21 and control device monitoring methods. This plan shall include the following information: monitoring point(s), monitoring methods for control devices, monitoring frequency, procedures for documenting exceedances, and procedures for mitigating noncompliances.

(4) When an owner or operator of a facility subject to 401 KAR 35:281 cannot comply with 401 KAR 34:281 by the date of permit issuance, the schedule of implementation required under Section 2 of 401 KAR 35:281.



Effective Date - March 12, 1997

**401 KAR 38:170. Specific Part B Requirements for Surface Impoundments.**

**RELATES TO:** KRS 224.10, 224.40, 224.46, 224.99, 40 CFR 270.17

**STATUTORY AUTHORITY:** KRS 224.10-100, 224.46-520

**NECESSITY AND FUNCTION:** To implement provisions of KRS 224.46-520 and to establish specific Part B requirements for facilities that treat, store or dispose of hazardous waste in surface impoundments.

**Section 1. Applicability.** The requirements in this administrative regulation apply to all owners and operators of hazardous waste sites or facilities that treat, store or dispose or will treat, store or dispose of hazardous waste in surface impoundments.

**Section 2. Additional Part B Requirements for Surface Impoundments.** In addition to the information required by 401 KAR 38:080, 401 KAR 38:090, and 401 KAR 38:100, owners and operators of facilities that store, treat, or dispose or will store, treat, or dispose of hazardous waste in surface impoundments, except as otherwise provided in Section 1 of 401 KAR 34:010 and Section 1 of 401 KAR 34:200, must provide the following additional information:

- (1) A list of the hazardous wastes placed or to be placed in each surface impoundment;
- (2) Detailed plans and an engineering report describing how the surface impoundment is designed and is or will be constructed, operated, and maintained to meet the requirements of Section 10 of 401 KAR 3:020 and Sections 2, 3, and 10 of 401 KAR 34:200, addressing the following items:
  - (a) The liner system (except for an existing portion of a surface impoundment). If an exemption from the requirement for a liner is sought as provided by Section 2(2) of 401 KAR 34:200, submit detailed plans and engineering and hydrogeologic reports as appropriate, describing alternate design and operating practices that will, in conjunction with location aspects, prevent the migration of any hazardous constituents into the groundwater or surface water at any future time;
  - (b) The double liner and leak (leachate) detection, collection, and removal system, if the surface impoundment is required to meet the requirements of Section 2(3) of 401 KAR 34:200. If an exemption from the requirements for double liners and a leak detection, collection, and removal system or alternative design is sought as provided by Section 2(4), (5), or (6) of 401 KAR 34:200, submit appropriate information;
  - (c) If the leak detection system is located in a saturated zone, submit detailed plans and an engineering report explaining the leak detection system design and operation, and the location of the saturated zone in relation to the leak detection system;
  - (d) The construction quality assurance (CQA) plan, if required under Section 10 of 401 KAR 34:020;
  - (e) Proposed action leakage rate, with rationale, if required under Section 3 of 401 KAR 34:200, and response action plan, if required under Section 10 of 401 KAR 34:200;

**Effective Date - February 10, 1994**

**401 KAR 38:180. Specific Part B Requirements for Waste Piles.**

**RELATES TO:** KRS 224.10, 224.40, 224.46, 224.99, 40 CFR 270.18

**STATUTORY AUTHORITY:** KRS 224.10-100, 224.46-520

**NECESSITY AND FUNCTION:** To implement provisions of KRS 224.46-520 and to establish specific Part B requirements for facilities that store or treat hazardous waste in waste piles.

**Section 1. Applicability.** The requirements in this administrative regulation apply to all owners and operators of hazardous waste sites or facilities that treat or store or will treat or store hazardous waste in waste piles.

**Section 2. Additional Part B Requirements for Waste Piles.** In addition to the information required by 401 KAR 38:080, 401 KAR 38:090, and 401 KAR 38:100, owners and operators of facilities that store or treat or will store or treat hazardous waste in waste piles, except as otherwise provided in Section 1 of 401 KAR 34:010 and Section 1 of 401 KAR 34:210, shall provide the following additional information:

- (1) A list of the hazardous wastes placed or to be placed in each waste pile;
- (2) If an exemption is sought to Section 2 of 401 KAR 34:210 and 401 KAR 34:060 as provided by Section 1(3) of 401 KAR 34:210, an explanation of how the standards of Section 1(3) of 401 KAR 34:210 will be complied with or detailed plans and an engineering report describing how the requirements of 401 KAR 34:060, Section 1(2)(b) will be met;
- (3) Detailed plans and an engineering report describing how the waste pile is designed and is or will be constructed, operated, and maintained to meet the requirements of Section 10 of 401 KAR 34:020 and Sections 2 to 4 of 401 KAR 34:210, addressing the following items:
  - (a)1. The liner system (except for an existing portion of a waste pile) if the waste pile will meet the requirements of Section 2(1) of 401 KAR 34:210. If an exemption from the requirement for a liner is sought, as provided by Section 2(2) of 401 KAR 34:210, the owner or operator shall submit detailed plans and engineering and hydrogeologic reports, as applicable, describing alternate design and operating practices that will, in conjunction with location aspects, prevent the migration of any hazardous constituents into the groundwater or surface water at any future time;
  2. The double liner and leak (leachate) detection, collection, and removal system, if the waste pile is required to meet the requirements of Section 2 of 401 KAR 34:210. If an exemption from the requirements for double liners and a leak detection, collection, and removal system or alternative design is sought as provided by Section 2 of 401 KAR 34:210, submit the appropriate information;
  3. If the leak detection system is located in a standard zone, submit detailed plans and an engineering report explaining the leak detection system design and operation, and the location of the saturated zone in relation to the leak detection system;
  4. The construction quality assurance (CQA) plan if required under 401 KAR 34:020;

5. Proposed action leakage rate, with rationale, if required under 401 KAR 34:210, and response action plan, if required under 401 KAR 34:210;
- (b) Control of run-on;
  - (c) Control of run-off;
  - (d) Management of collection and holding units associated with run-on and run-off control systems; and
  - (e) Control of wind dispersal of particulate matter, where applicable;
- (4) A description of how each waste pile, including the liner and appurtenances for control of run-on, and run-off, will be inspected in order to meet the requirements of Section 5(1) to (3) of 401 KAR 34:210. This information shall be included in the inspection plan submitted under Section 2(5) of 401 KAR 38:090;
- (5) If treatment is carried out on or in the pile, details of the process and equipment used, and the nature and quality of the residuals;
- (6) If ignitable or reactive wastes are to be placed in a waste pile, an explanation of how requirements of Section 6 of 401 KAR 34:210 will be complied with;
- (7) Incompatible wastes, or incompatible wastes and materials shall not be placed in a waste pile in accordance with Section 7 of 401 KAR 34:210;
- (8) A description of how hazardous waste residues and contaminated materials will be removed from the waste pile at closure, as required under Section 8(1) of 401 KAR 34:210. For any waste not to be removed from the waste pile upon closure, the owner or operator shall submit detailed plans and an engineering report describing how Section 6(1) and (2) of 401 KAR 34:230 and 38:500 will be complied with. This information shall be included in the closure plan and, where applicable, the postclosure plan submitted under Section 2(13) of 401 KAR 38:090; and
- (9) A waste management plan for EPA hazardous waste numbers F020, F021, F022, F023, F026, and F027 (chlorinated dioxins, dibenzofurans and phenols) describing how a waste pile that is not enclosed (as defined in 401 KAR 34:210, Section 1(3)) is or will be designed, constructed, operated, and maintained to meet the requirements of Section 9 of 401 KAR 34:210. This submission shall address the following items as specified in Section 9 of 401 KAR 34:210:
- (a) The volume, physical, and chemical characteristics of the wastes to be disposed in the waste pile, including their potential to migrate through soil or to volatilize or escape into the atmosphere;
  - (b) The attenuative properties of underlying and surrounding soils or other materials;
  - (c) The mobilizing properties of other materials codisposed with these wastes; and
  - (d) The effectiveness of additional treatment, design, or monitoring techniques.

Effective Date - March 12, 1997

**401 KAR 38:190. Specific Part B Requirements for Incinerators.**

**RELATES TO:** KRS 224.10, 224.40, 224.46, 224.99

**STATUTORY AUTHORITY:** KRS 224.10-100, 224.46-520

**NECESSITY AND FUNCTION:** KRS 224.40-305 and 224.46-520 require any person who treats, stores, recycles, or disposes of hazardous waste to first obtain a hazardous waste site or facility permit from the Cabinet. This chapter establishes the permitting process for hazardous waste sites or facilities. An overview of the permit program is found in the Necessity and Function of 401 KAR 38:010. This administrative regulation establishes specific Part B requirements for facilities that incinerate hazardous waste.

**Section 1. Applicability.** The requirements in this administrative regulation apply to all owners and operators of hazardous waste sites or facilities that incinerate or will incinerate hazardous waste.

**Section 2. Additional Part B Requirements for Incinerators.** In addition to the information required by 401 KAR 38:080, 38:090 and 38:100, owners and operators of facilities that incinerate or will incinerate hazardous waste, except as Section 1 of 401 KAR 34:010 and Section 1 of 401 KAR 34:240, provide otherwise, must fulfill the requirements of subsection (1), (2) or (3) of this section.

(1) When seeking an exemption under Section 1(2) or (3) of 401 KAR 34:240 (ignitable, corrosive or reactive wastes only) submit:

(a) Documentation that the waste is listed as a hazardous waste in Chapter 31 solely because it is ignitable (Hazard Code I), corrosive (Hazard Code C), or both; or

(b) Documentation that the waste is listed as a hazardous waste in Chapter 31 solely because it is reactive (Hazard Code R) for characteristics other than those listed in Section 4(1)(d) and (e) of 401 KAR 31:030, and will not be burned when other hazardous wastes are present in the combustion zone; or

(c) Documentation that the waste is a hazardous waste solely because it possesses the characteristic of ignitability, corrosivity, or both, as determined by the tests for characteristics of hazardous wastes under 401 KAR 31:030; or

(d) Documentation that the waste is a hazardous waste solely because it possesses the reactivity characteristics listed in Section 4(1)(a), (b), (c), (f), (g) or (h) of 401 KAR 31:030, and that it will not be burned when other hazardous wastes are present in the combustion zone; or

(2) Submit a trial burn plan or the results of a trial burn, including all required determinations, in accordance with Section 3 of 401 KAR 38:060; or

(3) In lieu of a trial burn, the applicant may submit the following information:

(a) An analysis of each waste or mixture of wastes to be burned including:

1. Heat value of the waste in the form and composition in which it will be burned;

2. Viscosity (if applicable), or description of physical form of the waste;
3. An identification of any hazardous organic constituents listed in 401 KAR 31:170, which are present in the waste to be burned, except that the applicant need not analyze for constituents listed in 401 KAR 31:170 which would reasonably not be expected to be found in the waste. The constituents excluded from analysis must be identified and the basis for their exclusion stated. The waste analysis must rely on analytical techniques specified in "Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods" EPA Publication SW-846, incorporated in 40 CFR 260.11, which is adopted in Section 3 of 401 KAR 30:010, or their equivalent;
4. An approximate quantification of the hazardous constituents identified in the waste, within the precision produced by the analytical methods specified in "Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods" EPA Publication SW-846, (incorporated in 40 CFR 260, which is adopted in Section 3 of 401 KAR 30:010);
5. A quantification of those hazardous constituents in the waste which may be designated as POHC's based on data submitted from other trial or operational burns which demonstrate compliance with the performance standards in Section 4 of 401 KAR 34:240.
  - (b) A detailed engineering description of the incinerator, including:
    1. Manufacturer's name and model number of incinerator;
    2. Type of incinerator;
    3. Linear dimension of incinerator unit including cross-sectional area of combustion chamber;
    4. Description of auxiliary fuel system (type/feed);
    5. Capacity of prime mover;
    6. Description of automatic waste feed cutoff system(s);
    7. Stack gas monitoring and pollution control monitoring system;
    8. Nozzle and burner design;
    9. Construction materials;
    10. Location and description of temperature, pressure, and flow measuring devices and control devices.
  - (c) A description and analysis of the waste to be burned compared with the waste for which data from operational or trial burns are provided to support the contention that a trial burn is not needed. The data should include those items listed in subsection (3)(a) of this section. This analysis should specify the POHC's which the applicant has identified in the waste for which a permit is sought, and any differences from the POHC's in the waste for which burn data are provided.
  - (d) The design and operating conditions of the incinerator unit to be used, compared with that for which comparative burn data are available.
  - (e) A description of the results submitted from any previously conducted trial burn(s) including:
    1. Sampling and analysis techniques used to calculate performance standards in Section 4 of 401 KAR 34:240;
    2. Methods and results of monitoring temperatures, waste feed rates, carbon monoxide, and an appropriate indicator of combustion gas velocity (including a statement concerning the precision and accuracy of this measurement);

(f) The expected incinerator operation information to demonstrate compliance with Sections 4 and 6 of 401 KAR 34:240 including:

1. Expected carbon monoxide (CO) level in the stack exhaust gas;
2. Waste feed rate;
3. Combustion zone temperature;
4. Indication of combustion gas velocity;
5. Expected stack gas volume, flow rate, and temperature;
6. Computed residence time for waste in the combustion zone;
7. Expected hydrochloric acid removal efficiency;
8. Expected fugitive emissions and their control procedures; and
9. Proposed waste feed cutoff limits based on the identified significant operating parameters;

(g) Such supplemental information as the Cabinet finds necessary to achieve the purposes of this subsection;

(h) Waste analysis data, including that submitted in subsection (3)(a) of this section, sufficient to allow the Cabinet to specify as permit Principal Organic Hazardous Constituents (permit POHC's) those constituents for which destruction and removal efficiencies will be required.

(4) The Cabinet shall approve a permit application without a trial burn if it finds that:

(a) The wastes are sufficiently similar; and

(b) The incinerator units are sufficiently similar, and the data from other trial burns are adequate to specify (under Section 6 of 401 KAR 34:240) operating conditions that will ensure that the performance standards in Section 4 of 401 KAR 34:240 will be met by the incinerator.

(5) The Cabinet shall require facilities that incinerate any of the hazardous waste listed in Section 5 of 401 KAR 31:040 to supply monitoring information from a comparable facility as specified in KRS 224.50-130(2)(a) and (b). The parameters monitored shall include those listed in Section 7 of 401 KAR 34:240 and products of complete combustion and products of incomplete combustion (PIC) from the stack and fugitive sources.

Effective Date - February 4, 1986

**401 KAR 38:200. Specific Part B Requirements for Land Treatment Facilities.**

**RELATES TO:** KRS 224.10, 224.40, 224.46, 224.99

**STATUTORY AUTHORITY:** KRS 224.10-100, 224.46-520

**NECESSITY AND FUNCTION:** KRS 224.40-305 and 224.46-520 require any person who treats, stores, recycles or disposes of hazardous waste to first obtain a hazardous waste site or facility permit from the Cabinet. This chapter establishes the permitting process for hazardous waste sites or facilities. An overview of the permit program is found in the Necessity and Function of 401 KAR 38:010. This regulation establishes specific Part B requirements for land treatment facilities.

**Section 1. Applicability.** The requirements in this regulation apply to all owners and operators of hazardous waste sites or facilities that dispose or will dispose of hazardous waste in land treatment facilities.

**Section 2. Additional Part B Requirements for Land Treatment Facilities.**

In addition to the information required by 401 KAR 38:080, 401 KAR 38:090 and 401 KAR 38:100, owners and operators of facilities that use or will use land treatment to dispose of hazardous waste, except as otherwise provided in Section 1 of 401 KAR 34:010 and Section 1 of 34:220, must provide the following additional information:

- (1) A description of plans to conduct a treatment demonstration as required under Section 3 of 401 KAR 34:220. The description must include the following information:
  - (a) The wastes for which the demonstration will be made and the potential hazardous constituents in the wastes;
  - (b) The data sources to be used to make the demonstration (e.g., literature, laboratory data, field data, or operating data);
  - (c) Any specific laboratory or field tests that will be conducted, including
    1. The type of test (e.g., column leaching, degradation);
    2. Materials and methods, including analytical procedures;
    3. Expected time for completion;
    4. Characteristics of the unit that will be simulated in the demonstration, including treatment zone characteristics, climatic conditions, and operating practices;
- (2) A description of a land treatment program, as required under Section 2 of 401 KAR 34:220. This information must be submitted with the plans for the treatment demonstration, and updated following the treatment demonstration. The land treatment program must address the following items:
  - (a) The wastes to be land treated;
  - (b) Design measures and operating practices necessary to maximize treatment in accordance with Section 4(1) of 401 KAR 34:220 including:
    1. Waste application method and rate;

2. Measures to control soil pH;
3. Enhancement of microbial or chemical reactions;
4. Control of moisture content;
- (c) Provisions for unsaturated zone monitoring, including:
  1. Sampling equipment, procedures, and frequency;
  2. Procedures for selecting sampling locations;
  3. Analytical procedures;
  4. Chain of custody control;
  5. Procedures for establishing background values;
  6. Statistical methods for interpreting results;
  7. The justification for any hazardous constituents recommended for selection as principal hazardous constituents, in accordance with the criteria for such selection in Section 6(1) of 401 KAR 34:220;
- (d) A list of hazardous constituents reasonably expected to be in, or derived from, the wastes to be land treated based on waste analysis performed pursuant to Section 4 of 401 KAR 34:020.
- (e) The proposed dimensions of the treatment zone;
- (3) A description of how the unit is or will be designed, constructed, operated, and maintained in order to meet the requirements of Section 4 of 401 KAR 34:220. This submission must address the following items:
  - (a) Control of run-on;
  - (b) Collection and control of run-off;
  - (c) Minimization of run-off of hazardous constituents from the treatment zone;
  - (d) Management of collection and holding facilities associated with run-on and run-off control systems;
  - (e) Periodic inspection of the unit. This information should be included in the inspection plan submitted under Section 2(5) of 401 KAR 38:090;
  - (f) Control of wind dispersal of particulate matter, if applicable;
  - (4) If food chain crops are to be grown in or on the treatment zone of the land treatment unit, a description of how the demonstration required under Section 5(1) of 401 KAR 34:220 will be conducted including:
    - (a) Characteristics of the food chain crop for which the demonstration will be made;
    - (b) Characteristics of the waste, treatment zone, and waste application method and rate to be used in the demonstration;
    - (c) Procedures for crop growth, sample collection, sample analysis, and data evaluation;
    - (d) Characteristics of the comparison crop including the location and conditions under which it was or will be grown.
    - (e) If food chain crops are to be grown, and cadmium is present in the land treated waste, a description of how the requirements of Section 5(2) of 401 KAR 34:220 will be complied with;
    - (f) A description of the vegetative cover to be applied to closed portions of the facility, and a plan for maintaining such cover during the postclosure care period, as required under Section 8(1)(h) and (3)(b) of 401 KAR 34:220. This information should be included in the closure plan and, where applicable, the postclosure care plan submitted under Section 2(13) of 401 KAR 38:090;



(g) If ignitable or reactive wastes will be placed in or on the treatment zone, an explanation of how the requirements of Section 9 of 401 KAR 34:220 will be complied with;

(h) Incompatible wastes, or incompatible wastes and materials, shall not be placed in or on the same treatment zone in accordance with Section 10 of 401 KAR 34:220.

(i) A waste management plan for EPA hazardous waste numbers F020, F021, F022, F023, F026, and F027 (chlorinated dioxins, dibenzofurans and phenols) describing how a land treatment facility is or will be designed, constructed, operated, and maintained to meet the requirements of Section 11 of 401 KAR 34:220. This submission must address the following items as specified in Section 11 of 401 KAR 34:220:

1. The volume, physical, and chemical characteristics of the wastes, including their potential to migrate through soil or to volatilize or escape into the atmosphere;
2. The attenuative properties of underlying and surrounding soils or other materials;
3. The mobilizing properties of other materials codisposed with these wastes; and
4. The effectiveness of additional treatment, design, or monitoring techniques.

**Effective Date - February 10, 1986**

**401 KAR 38:210. Specific Part B Requirements for Landfills.**

**RELATES TO:** KRS 224.10, 224.40, 224.46, 224.99, 40 CFR 270.21

**STATUTORY AUTHORITY:** KRS 224.10-100, 224.46-520

**NECESSITY AND FUNCTION:** To implement provisions of KRS 224.46-520 and to establish specific Part B requirements for landfills.

**Section 1. Applicability.** The requirements in this administrative regulation apply to all owners and operators of hazardous waste management sites or facilities that dispose of hazardous waste in landfills.

**Section 2. Additional Part B Requirements for Landfills.** In addition to the information required by 401 KAR 38:080, 401 KAR 38:090 and 401 KAR 38:100, owners and operators of facilities that dispose or will dispose of hazardous waste in landfills, except as otherwise provided in Section 1 of 401 KAR 34:010 and Section 1 of 401 KAR 34:230, shall provide the following additional information:

- (1) A list of hazardous wastes placed or to be placed in each landfill or landfill cell;
- (2) Detailed plans and an engineering report describing how the landfill is designed and is or will be constructed, operated, and maintained to comply with the requirements of Section 10 of 401 KAR 34:020 and Sections 2 to 4 of 401 KAR 34:230, addressing the following items as specified in 401 KAR 34:230:
  - (a)1. The liner system and leachate collection and removal system (except for an existing portion of a landfill). If an exemption from the requirements for a liner and a leachate collection and removal system is sought as provided by Section 2(2) of 401 KAR 34:230, submit detailed plans and engineering and hydrogeologic reports, as appropriate, describing alternate design and operating practices that will, in conjunction with location aspects, prevent the migration of any hazardous constituent into the groundwater or surface water at any future time;
  2. The double liner and leak (leachate) detection, collection, and removal system, if the landfill is required to comply with Section 2 of 401 KAR 34:230. If an exemption from the requirements for double liners and a leak detection, collection, and removal system or alternative design is sought as provided by Section 3 of 401 KAR 34:230, submit appropriate information;
  3. If the leak detection system is located in a saturated zone, submit detailed plans and an engineering report explaining the leak detection system design and operation, and the location of the saturated zone in relation to the leak detection system;
  4. The construction quality assurance (CQA) plan if required under 401 KAR 34:020;
  5. Proposed action leakage rate, with rationale, if required under 401 KAR 34:230, and response action plan, if required under 401 KAR 34:230;
- (b) Control of run-on;
- (c) Control of run-off;

(d) Management of collection and holding facilities associated with run-on and run-off control systems; and

(e) Control of wind dispersal of particulate matter, where applicable.

(3) If an exemption from 401 KAR 34:060 is sought, as provided by Section 3(1) of 401 KAR 34:230, the owner or operator shall submit detailed plans and an engineering report explaining the location of the saturated zone in relation to the landfill, the design of a double-liner system that incorporates a leak detection system between the liners, and a leachate collection and removal system above the liners;

(4) A description of how each landfill, including the liner and cover systems, will be inspected in order to meet the requirements of Section 4(1) to (3) of 401 KAR 34:230. This information shall be included in the inspection plan submitted under Section 2(5) of 401 KAR 38:090;

(5) Detailed plans and an engineering report describing the final cover which will be applied to each landfill or landfill cell at closure in accordance with Section 6(1) of 401 KAR 34:230, and a description of how each landfill will be maintained and monitored after closure in accordance with Section 6(2) of 401 KAR 34:230. This information shall be included in the closure and postclosure plans submitted under Section 2(13) of 401 KAR 38:090;

(6) If ignitable or reactive wastes will be landfilled, an explanation of how the requirements of Section 7 of 401 KAR 34:230 will be complied with;

(7) Incompatible wastes, or incompatible wastes and materials shall not be landfilled in accordance with Section 8 of 401 KAR 34:230;

(8) If bulk or noncontainerized liquid waste or waste containing free liquid will be landfilled, an explanation of how the requirements of Section 9 of 401 KAR 34:230 and KRS 224.46-520(2) will be complied with;

(9) If containers of hazardous waste are to be landfilled, an explanation of how the requirements of Sections 10 and 11 of 401 KAR 34:230, as applicable, will be complied with;

(10) A waste management plan for EPA hazardous waste numbers F001, F002, F003, F004, F005, F006, F007, F008, F009, F010, F011, F012, F013, F014, F015, F016, F017, F018, F019, F020, F021, F022, F023, F026, and F027 (chlorinated dioxins, dibenzofurans and phenols) shall be submitted explaining how a landfill is or will be designed, constructed, operated, and maintained to meet the requirements of Section 12 of 401 KAR 34:230 and KRS 224.46-520(2). This submission shall address the following items as specified in Section 12 of 401 KAR 34:230 and KRS 224.46-520(2):

(a) The volume, physical, and chemical characteristics of the wastes, including their potential to migrate through soil or to volatilize or escape into the atmosphere;

(b) The attenuative properties of underlying and surrounding soils or other materials;

(c) The mobilizing properties of other materials codisposed with these wastes; and

(d) The effectiveness of additional treatment, design, or monitoring techniques.

Effective Date - November 15, 1990

**401 KAR 38:230. Specific Part B Requirements for Miscellaneous Units.**

**RELATES TO:** KRS 224.10, 224.40, 224.46, 224.99

**STATUTORY AUTHORITY:** KRS 224.10-100, 224.46-520

**NECESSITY AND FUNCTION:** KRS 224.40-305 and 224.46-520 require any person who treats, stores, recycles, or disposes of hazardous waste to first obtain a hazardous waste site or facility permit from the Natural Resources and Environmental Protection Cabinet. This chapter establishes the permitting process for hazardous waste sites or facilities. An overview of the permit program is found in the Necessity and Function of 401 KAR 38:010. This regulation establishes the specific Part B information requirements for miscellaneous units.

**Section 1. Specific Part B Information Requirements.** Except as otherwise provided in Section 1 of 401 KAR 34:250, owners and operators of facilities that treat, store, or dispose of hazardous waste in miscellaneous units shall provide the following additional information:

- (1) A detailed description of the unit being used or proposed for use, including the following:
  - (a) Physical characteristics, materials of construction, and dimensions of the unit;
  - (b) Detailed plans and engineering reports describing how the unit will be located, designed, constructed, operated, maintained, monitored, inspected, and closed to comply with the requirements of Sections 2 and 3 of 401 KAR 34:250; and
  - (c) For disposal units, a detailed description of the plans to comply with the postclosure requirements of Section 4 of 401 KAR 34:250.
- (2) Detailed hydrologic, geologic, and meteorologic assessments and land use maps for the region surrounding the site that address and ensure compliance of the unit with each factor in the environmental performance standards of Section 2 of 401 KAR 34:250. If the applicant can demonstrate that he does not violate the environmental performance standards of Section 2 of 401 KAR 34:250 and the Cabinet agrees with the demonstration, preliminary hydrologic, geologic, and meteorologic assessments shall suffice.
- (3) Information on the potential pathways of exposure of humans or environmental receptors to hazardous waste or hazardous constituents and on the potential magnitude and nature of such exposures.
- (4) For any treatment unit, a report on a demonstration of the effectiveness of the treatment based on laboratory or field data.
- (5) Any additional information determined by the Cabinet to be necessary for evaluation of compliance of the unit with the environmental performance standards of Section 2 of 401 KAR 34:250.

**Effective Date - February 10, 1994**

**401 KAR 38:240. Specific Part B Requirements for Process Vents.**

**RELATES TO:** KRS 224.10, 224.40, 224.46, 224.99, 40 CFR 270.24

**STATUTORY AUTHORITY:** KRS 224.10-100, 224.46-520

**NECESSITY AND FUNCTION:** To implement provisions of KRS 224.46-520 and to establish specific Part B requirements for process vents.

**Section 1. Specific Part B Information Requirements for Process Vents.** Except as otherwise provided in 401 KAR 34:010, owners and operators of facilities that have process vents to which 401 KAR 34:275 applies shall provide the following additional information:

(1) For facilities that cannot install a closed-vent system and control device to comply with the provisions 401 KAR 34:275 on the effective date that the facility becomes subject to the provisions of 401 KAR 34:275 or 401 KAR 35:275, an implementation schedule as specified in Section 4(1)(b) of 401 KAR 34:275.

(2) Documentation of compliance with the process vent standards in Section 3 of 401 KAR 34:275 including:

(a) Information and data identifying all affected process vents, annual throughput and operating hours of each affected unit, estimated emission rates for each affected vent and for the overall facility (that is, the total emissions for all affected vents at the facility), and the approximate location within the facility of each affected unit (for example, identify the hazardous waste management units on a facility plot plan).

(b) Information and data supporting estimates of vent emissions and emission reduction achieved by add-on control devices based on engineering calculations or source tests. For the purpose of determining compliance, estimates of vent emissions and emission reductions shall be made using operating parameter values (temperatures, flow rates, or concentrations for example) that represent the conditions that exist when the waste management unit is operating at the highest load or capacity level reasonably expected to occur.

(c) Information and data used to determine whether or not a process vent is subject to the requirements of Section 3 of 401 KAR 34:275.

(3) Where an owner or operator applies for permission to use a control device other than a thermal vapor incinerator, catalytic vapor incinerator, flare, boiler, process heater, condenser, or carbon adsorption system to comply with the requirements of Section 3 of 401 KAR 34:275, and chooses to use test data to determine the organic removal efficiency or the total organic compound concentration achieved by the control device, a performance test plan as specified in Section 6(2)(c) of 401 KAR 34:275.

(4) Documentation of compliance with Section 4 of 401 KAR 34:275, including:

(a) A list of all information references and sources used in preparing the documentation.

(b) Records, including the dates, of each compliance test required by Section 4(1) of 401 KAR 34:275.

(c) A design analysis, specifications, drawings, schematics, and piping and instrumentation diagrams based on the appropriate sections of "APTI Course 415: Control of Gaseous Emissions" or other engineering texts acceptable to the Cabinet that present basic control device design information. The design analysis shall address the vent stream characteristics and control device operation parameters as specified in Section 6(2)(d)3 of 401 KAR 34:275.

(d) A statement signed and dated by the owner or operator certifying that the operating parameters used in the design analysis reasonably represent the conditions that exist when the hazardous waste management unit is or would be operating at the highest load or capacity level reasonably expected to occur.

(e) A statement signed and dated by the owner or operator certifying that the control device is designed to operate at an efficiency of ninety-five (95) weight percent or greater unless the total organic emission limits of Section 3(1) of 401 KAR 34:275 for affected process vents at the facility can be attained by a control device involving vapor recovery at an efficiency less than ninety-five (95) weight percent.

**Effective Date - March 12, 1997**

**401 KAR 38:250. Specific Part B Requirements for Equipment.**

**RELATES TO:** KRS 224.10, 224.40, 224.46, 224.99, 40 CFR 270.25

**STATUTORY AUTHORITY:** KRS 224.10-100, 224.46-520

**NECESSITY AND FUNCTION:** To implement provisions of KRS 224.46-520 and to establish specific Part B requirements for equipment.

**Section 1. Specific Part B information requirements for equipment.** Except as otherwise provided in 401 KAR 34:010, owners and operators of facilities that have equipment to which 401 KAR 34:280 applies shall provide the following additional information:

- (1) For each piece of equipment to which 401 KAR 34:280 applies:
  - (a) Equipment identification number and hazardous waste management unit identification.
  - (b) Approximate locations within the facility (for example, identify the hazardous waste management unit on a facility plot plan).
  - (c) Type of equipment (for example, a pump or pipeline valve).
  - (d) Percent by weight total organics in the hazardous waste stream at the equipment.
  - (e) Hazardous waste state at the equipment (for example, gas, vapor, or liquid).
  - (f) Method of compliance with the standard (for example, "monthly leak detection and repair" or "equipped with dual mechanical seals").
- (2) For facilities that cannot install a closed-vent system and control device to comply with the provisions of 401 KAR 34:280 on the effective date that the facility becomes subject to the provisions of 401 KAR 34:280 or 35:280, an implementation schedule as specified in Section 4(1)(b) of 401 KAR 34:275.
- (3) Where an owner or operator applies for permission to use a control device other than a thermal vapor incinerator, catalytic vapor incinerator, flare, boiler, process heater, condenser, or carbon adsorption system and chooses to use test data to determine the organic removal efficiency or the total organic compound concentration achieved by the control device, a performance test plan as specified in Section 6(2)(c) of 401 KAR 34:275.
- (4) Documentation that demonstrates compliance with the equipment standards in Sections 3 to 10 of 401 KAR 34:280. This documentation shall contain the records required under Section 15 of 401 KAR 34:280. The Cabinet may request further documentation before deciding if compliance has been demonstrated.
- (5) Documentation to demonstrate compliance with Section 10 of 401 KAR 34:280 shall include the following information:
  - (a) A list of all information references and sources used in preparing the documentation.
  - (b) Records, including the dates, of each compliance test required by Section 4(10) of 401 KAR 34:275.

(c) A design analysis, specifications, drawings, schematics, and piping and instrumentation diagrams based on the appropriate sections of "ATPI Course 415: Control of Gaseous Emissions" or other engineering texts acceptable to the Cabinet that present basic control device design information. The design analysis shall address the vent stream characteristics and control device operation parameters as specified in Section 6(2)(d)3 of 401 KAR 34:275.

(d) A statement signed and dated by the owner or operator certifying that the operating parameters used in the design analysis reasonably represent the conditions that exist when the hazardous waste management unit is operating at the highest load or capacity level reasonably expected to occur.

(e) A statement signed and dated by the owner or operator certifying that the control device is designed to operate at an efficiency of ninety-five (95) weight percent or greater.



Effective Date - February 10, 1994

**401 KAR 38:260. Specific Part B Information Requirements for Boilers and Industrial Furnaces Burning Hazardous Waste.**

**RELATES TO:** KRS 224.10, 224.40, 224.46, 224.99, 40 CFR 270.22

**STATUTORY AUTHORITY:** KRS 224.10-100, 224.46-520

**NECESSITY AND FUNCTION:** To implement provisions of KRS 224.46-520 and to establish specific Part B requirements for boilers and industrial furnaces burning hazardous waste.

**Section 1. Specific Part B Information Requirements for Boilers and Industrial Furnaces Burning Hazardous Waste.**

(1) Trial burns.

(a) General. Except as provided below, owners and operators that are subject to the standards to control organic emissions provided by Section 5 of 401 KAR 36:020, standards to control particulate matter provided by Section 6 of 401 KAR 36:020, standards to control metals emissions provided by Section 7 of 401 KAR 36:020, or standards to control hydrogen chloride or chlorine gas emissions provided by Section 8 of 401 KAR 36:020 shall conduct a trial burn to demonstrate conformance with those standards and shall submit a trial burn plan or the results of a trial burn, including all required determinations, in accordance with Section 7 of 401 KAR 38:060.

1. A trial burn to demonstrate conformance with a particular emission standard may be waived under provisions of Sections 5 to 8 of 401 KAR 36:020 and paragraphs (b) to (e) of this subsection; and

2. The owner or operator may submit data in lieu of a trial burn, as prescribed in paragraph (f) of this subsection.

(b) Waiver of trial burn for destruction and removal efficiency (DRE).

1. Boilers operated under special operating requirements. When seeking to be permitted under Sections 5(1)(d) and 11 of 401 KAR 36:020 that automatically waive the DRE trial burn, the owner or operator of a boiler shall submit documentation that the boiler operates under the special operating requirements provided by Section 11 of 401 KAR 36:020.

2. Boilers and industrial furnaces burning low risk waste. When seeking to be permitted under the provisions for low risk waste provided by Sections 5(1)(e) and 10 of 401 KAR 36:020 that waive the DRE trial burn, the owner or operator shall submit:

a. Documentation that the device is operated in conformance with the requirements of Section 10(1)(a) of 401 KAR 36:020.

b. Results of analyses of each waste to be burned, documenting the concentrations of nonmetal compounds listed in 401 KAR 31:170, except for those constituents that would reasonably not be expected to be in the waste. The constituents excluded from analysis shall be identified and the basis for their exclusion explained. The analysis shall rely on analytical techniques specified in test methods for evaluating solid waste, physical and chemical methods incorporated by reference in Section 3 of 401 KAR 30:010.

c. Documentation of hazardous waste firing rates and calculations of reasonable, worst-case emission rates of each constituent identified in clause b of this subparagraph using procedures provided by Section 10(1)(b)2 of 401 KAR 36:020.

d. Results of emissions dispersion modeling for emissions identified in clause c of this subparagraph using modeling procedures prescribed by Section 7(8) of 401 KAR 36:020. The Cabinet shall review the emission modeling conducted by the applicant to determine conformance with these procedures. The Cabinet shall either approve the modeling or determine that alternate or supplementary modeling is appropriate.

e. Documentation that the maximum annual average ground level concentration of each constituent identified in clause b of this subparagraph quantified in conformance with clause d of this subparagraph does not exceed the allowable ambient level established in Sections 4 or 5 of 401 KAR 36:025. The acceptable ambient concentration for emitted constituents for which a specific reference air concentration has not been established in Section 4 of 401 KAR 36:025 or risk-specific dose has not been established in Section 5 of 401 KAR 36:025 is one-tenth (0.1) micrograms per cubic meter as noted in the footnote to Section 4 of 401 KAR 36:025.

(c) Waiver of trial burn for metals. When seeking to be permitted under the Tier I (or adjusted Tier I) metals feed rate screening limits provided by Section 7(2) and (5) of 401 KAR 36:020 that control metals emissions without requiring a trial burn, the owner or operator shall submit:

1. Documentation of the feed rate of hazardous waste, other fuels, and industrial furnace feed stocks;
2. Documentation of the concentration of each metal controlled by Section 7(2) or (5) of 401 KAR 36:020 in the hazardous waste, other fuels, and industrial furnace feedstocks, and calculations of the total feed rate of each metal;
3. Documentation of how the applicant will ensure that the Tier I feed rate screening limits provided by Section 7(2) or (5) of 401 KAR 36:020 will not be exceeded during the averaging period provided by that subsection;
4. Documentation to support the determination of the terrain-adjusted effective stack height, good engineering practice stack height, terrain type, and land use as provided by Section 7(2)(c) to (e) of 401 KAR 36:020;
5. Documentation of compliance with the provisions of Section 7(2)(f) of 401 KAR 36:020, if applicable, for facilities with multiple stacks;
6. Documentation that the facility does not fail the criteria provided by Section 7(2)(g) of 401 KAR 36:020 for eligibility to comply with the screening limits; and
7. Proposed sampling and metals analysis plan for the hazardous waste, other fuels, and industrial furnace feed stocks.

(d) Waiver of trial burn for particulate matter. When seeking to be permitted under the low risk waste provisions of Section 10(2) of 401 KAR 36:020 which waives the particulate standard (and trial burn to demonstrate conformance with the particulate standard), applicants shall submit documentation supporting conformance with paragraphs (b)2 and (c) of this subsection.

(e) Waiver of trial burn for HCl and Cl<sub>2</sub>. When seeking to be permitted under the Tier I (or adjusted Tier I) feed rate screening limits for total chloride and chlorine provided by Section

8(2)(a) and (5) of 401 KAR 36:020 that control emissions of hydrogen chloride (HCl) and chlorine gas (Cl<sub>2</sub>) without requiring a trial burn, the owner or operator shall submit:

1. Documentation of the feed rate of hazardous waste, other fuels, and industrial furnace feed stocks;
2. Documentation of the levels of total chloride and chlorine in the hazardous waste, other fuels, and industrial furnace feedstocks, and calculations of the total feed rate of total chloride and chlorine;
3. Documentation of how the applicant shall ensure that the Tier I (or adjusted Tier I) feed rate screening limits provided by Section 8(2)(a) or (5) of 401 KAR 36:020 will not be exceeded during the averaging period provided by that subsection;
4. Documentation to support the determination of the terrain-adjusted effective stack height, good engineering practice stack height, terrain type, and land use as provided by Section 8(2)(c) of 401 KAR 36:020;
5. Documentation of compliance with the provisions of Section 8(2)(d) of 401 KAR 36:020, if applicable, for facilities with multiple stacks;
6. Documentation that the facility does not fail the criteria provided by Section 8(2)(c) of 401 KAR 36:020 for eligibility to comply with the screening limits; and
7. Proposed sampling and analysis plan for total chloride and chlorine for the hazardous waste, other fuels, and industrial furnace feedstocks.

(f) Data in lieu of trial burn. The owner or operator may seek an exemption from the trial burn requirements to demonstrate conformance with Sections 5 to 8 of 401 KAR 36:020 and Section 7 of 401 KAR 38:060 by providing the information required by Section 7 of 401 KAR 36:020 from previous compliance testing of the device in conformance with Section 4 of 401 KAR 36:020, or from compliance testing or trial or operational burns of similar boilers or industrial furnaces burning similar hazardous wastes under similar conditions. If data from a similar device is used to support a trial burn waiver, the design and operating information required by Section 7 of 401 KAR 38:060 shall be provided for both the similar device and the device to which the data is to be applied, and a comparison of the design and operating information shall be provided. The Cabinet shall approve a permit application without a trial burn if he finds that the hazardous wastes are sufficiently similar, the devices are sufficiently similar, the operating conditions are sufficiently similar, and the data from other compliance tests, trial burns, or operational burns are adequate to specify (under Section 3 of 401 KAR 36:020) operating conditions that will ensure conformance with Section 3(3) of 401 KAR 36:020. In addition, the following information shall be submitted:

1. For a waiver from any trial burn:
  - a. A description and analysis of the hazardous waste to be burned compared with the hazardous waste for which data from compliance testing, or operational or trial burns are provided to support the contention that a trial burn is not needed;
  - b. The design and operating conditions of the boiler or industrial furnace to be used, compared with that for which comparative burn data are available; and
  - c. Such supplemental information as the Cabinet finds necessary to achieve the purposes of this subsection.
2. For a waiver of the DRE trial burn, the basis for selection of POHCs used in the other trial or operational burns which demonstrate compliance with the DRE performance standard in

Section 5(1) of 401 KAR 36:020. This analysis shall specify the constituents in 401 KAR 31:170, that the applicant has identified in the hazardous waste for which a permit is sought, and any differences from the POHCs in the hazardous waste for which burn data are provided.

(2) Alternative HC limit for industrial furnaces with organic matter in raw materials. Owners and operators of industrial furnaces requesting an alternative HC limit under Section 5(6) of 401 KAR 36:020 shall submit the following information at a minimum:

(a) Documentation that the furnace is designed and operated to minimize HC emissions from fuels and raw materials;

(b) Documentation of the proposed baseline flue gas HC (and CO) concentration, including data on HC (and CO) levels during tests when the facility produced normal products under normal operating conditions from normal raw materials while burning normal fuels and when not burning hazardous waste;

(c) Test burn protocol to confirm the baseline HC (and CO) level including information on the type and flow rate of all feedstreams, point of introduction of all feedstreams, total organic carbon content (or other appropriate measure of organic content) of all nonfuel feedstreams, and operating conditions that affect combustion of fuel(s) and destruction of hydrocarbon emissions from nonfuel sources;

(d) Trial burn plan to:

1. Demonstrate that flue gas HC (and CO) concentrations when burning hazardous waste do not exceed the baseline HC (and CO) level; and

(2) Identify the types and concentrations of organic compounds listed in 401 KAR 31:170, that are emitted when burning hazardous waste in conformance with procedures prescribed by the Cabinet;

(e) Implementation plan to monitor over time changes in the operation of the facility that could reduce the baseline HC level and procedures to periodically confirm the baseline HC level; and

(f) Such other information as the Cabinet finds necessary to achieve the purposes of this subsection.

(3) Alternative metals implementation approach. When seeking to be permitted under an alternative metals implementation approach under Section 7(b) of 401 KAR 36:020, the owner or operator shall submit documentation specifying how the approach ensures compliance with the metals emissions standards of Section 7(3) or (4) of 401 KAR 36:020 and how the approach can be effectively implemented and monitored. Further, the owner or operator shall provide such other information that the Cabinet finds necessary to achieve the purposes of this subsection.

(4) Automatic waste feed cutoff system. Owners and operators shall submit information describing the automatic waste feed cutoff system, including any pre-alarm systems that may be used.

(5) Direct transfer. Owners and operators that use direct transfer operations to feed hazardous waste from transport vehicles (containers, as defined in Section 12 of 401 KAR 36:020) directly to the boiler or industrial furnace shall submit information supporting conformance with the standards for direct transfer provided by Section 12 of 401 KAR 36:020.

(6) Residues. Owners and operators that claim that their residues are excluded from administrative regulation under the provisions of Section 13 of 401 KAR 36:020 shall submit information adequate to demonstrate conformance with those provisions.

Effective Date - February 10, 1994

**401 KAR 38:270. Specific Part B Information Requirements for Drip Pads.**

**RELATES TO:** KRS 224.10, 224.40, 224.46, 224.99, 40 CFR 270.26

**STATUTORY AUTHORITY:** KRS 224.10-100, 224.46-520

**NECESSITY AND FUNCTION:** To implement provisions of KRS 224.46-520 and to establish specific Part B information requirements for drip pads.

**Section 1. Special Part B Information Requirements for Drip Pads.** Except as otherwise provided by 401 KAR 34:100, owners and operators of hazardous waste treatment, storage, or disposal facilities that collect, store, or treat hazardous waste on drip pads shall provide the following additional information:

- (1) A list of hazardous wastes placed or to be placed on each drip pad.
- (2) If an exemption is sought to 401 KAR 34:060, as provided by Section 1 of 401 KAR 34:060, detailed plans and an engineering report describing how the requirements of Section 1(2)(b) of 401 KAR 34:060 will be met.
- (3) Detailed plans and an engineering report describing how the drip pad will be designed, constructed, operated and maintained to meet the requirements of Section 4 of 401 KAR 34:285, including the as-built drawings and specifications. This submission shall address the following items as specified in Section 5 of 401 KAR 34:285:
  - (a) The design characteristics of the drip pad.
  - (b) The liner system.
  - (c) The leakage detection system, including the leak detection system and how it is designed to detect the failure of the drip pad or the presence of any releases of hazardous waste or accumulated liquid at the earliest practicable time.
  - (d) Practices designed to maintain drip pads.
  - (e) The associated collection system.
  - (f) Control of run-on to the drip pad.
  - (g) Control of run-off from the drip pad.
  - (h) The interval at which drippage and other materials will be removed from the associated collection system and a statement demonstrating that the interval will be sufficient to prevent overflow onto the drip pad.
  - (i) Procedures for cleaning the drip pad at least once every seven (7) days to ensure the removal of any accumulated residues of waste or other materials, including but not limited to rinsing, washing with detergents or other appropriate solvents, or steam cleaning and provisions for documenting the date, time, and cleaning procedure used each time the pad is cleaned.
  - (j) Operating practices and procedures that will be followed to ensure that tracking of hazardous waste or waste constituents off the drip pad due to activities by personnel or equipment is minimized.

(k) Procedures for ensuring that, after removal from the treatment vessel, treated wood from pressure and nonpressure processes is held on the drip pad until drippage has ceased, including recordkeeping practices.

(l) Provisions for ensuring that collection and holding units associated with the run-on and run-off control systems are emptied or otherwise managed as soon as possible after storms to maintain design capacity of the system.

(m) If treatment is carried out on the drip pad, details of the process equipment used, and the nature and quality of the residuals.

(n) A description of how each drip pad, including appurtenances for control of run-on and run-off, will be inspected in order to meet the requirements of Section 4 of 401 KAR 34:285. This information shall be included in the inspection plan submitted under Section 2(5) of 401 KAR 38:090.

(o) A certification signed by an engineer, stating that the drip pad design meets the requirements of Section 4(1) to (6) of 401 KAR 34:285.

(p) A description of how hazardous waste residues and contaminated materials will be removed from the drip pad at closure, as required under Section 6(1) of 401 KAR 34:285. For any waste not to be removed from the drip pad upon closure, the owner or operator shall submit detailed plans and an engineering report describing how Section 6(1) and (2) of 401 KAR 34:230 will be complied with. This information shall be included in the closure plan and, where applicable, the postclosure plan submitted under Section 2(13) of 401 KAR 38:090.

**Effective Date - March 12, 1997**

**401 KAR 38:500. Provisions for Approval by the Local Government or the Kentucky Regional Integrated Treatment and Disposal Facility Siting Board.**

**RELATES TO:** KRS 224.10, 224.40, 224.43, 224.46, 224.99

**STATUTORY AUTHORITY:** KRS 224.10-100, 224.46-520

**NECESSITY AND FUNCTION:** KRS 224.40-305 and 224.46-520 require any person who treats, stores, recycles, or disposes of hazardous waste to first obtain a hazardous waste site or facility permit from the Cabinet. KRS 224.46-810 through 224.870, 224.40-310 and 224.46-520(1) require that the Cabinet may not issue a permit to a regional integrated waste treatment and disposal demonstration facility without approval by the Kentucky Regional Integrated Waste Treatment and Disposal Facility Siting Board. KRS 225.40-310(5) and (6) and 224.46-520(1) require that the Cabinet may not issue a permit to any hazardous waste disposal facility, except for a regional integrated waste treatment and disposal facility, without approval from the local government. This administrative regulation establishes the permitting process for hazardous waste sites or facilities. This administrative regulation establishes provisions for approval by either the local government or the Kentucky Regional Integrated Waste Treatment and Disposal Facility Siting Board prior to obtaining a permit for a hazardous waste disposal site or facility from the Cabinet.

**Section 1. Definitions of Terms Used in this Regulation.** The definitions previously found in this section have been relocated to the definition regulation for this chapter, which is 401 KAR 38:005.

**Section 2. Applicability.**

(1) This administrative regulation applies to owners and operators of new or proposed hazardous waste landfills, incinerators, or other sites or facilities for the land disposal of hazardous waste.

(2) This administrative regulation applies to owners and operators of existing hazardous waste landfills, incinerators, or other sites or facilities for the land disposal of hazardous waste who request a permit modification which does not meet the criteria of a minor modification as defined in Section 3 of 401 KAR 38:040. For permit modifications which are not minor modifications, approval of the local government or board shall only concern those conditions to be included in the permit modification, in accordance with Section 2(3) of 401 KAR 38:050.

(3) This administrative regulation applies to owners and operators of new and existing hazardous waste treatment facilities (as defined in Section 1 of 401 KAR 38:005) and hazardous waste storage facilities (as defined in Section 1 of 401 KAR 38:005) who request a permit modification to include a disposal facility (as defined in Section 1 of 401 KAR 38:005) instead of or in addition to any permitted hazardous waste activity already conducted by the owner or operator.



**Section 3. Local Government Approval.** The Cabinet shall not issue a permit in accordance with this chapter, to construct or operate a hazardous waste site or facility which meets the requirements of Section 2 of this administrative regulation, unless:

(1) The Cabinet has received written approval from the local government in accordance with KRS 224.855(6); or

(2) The hazardous waste site or facility is not subject to KRS 224.40-310(6) in accordance with KRS 224.40-310(7).

**Section 4. Board Approval.** The Cabinet shall not issue a permit in accordance with this chapter, to construct or operate a hazardous waste site or facility which meets the definition of a regional integrated waste treatment and disposal demonstration facility in KRS 224.46-46-810(4), unless the board issues a Certificate of Environmental Safety and Public Necessity in accordance with KRS 224.46-830.